



LIBRARY  
SOUTHERN CALIFORNIA SCHOOL  
OF THEOLOGY  
CLAREMONT, CALIF.











# PALESTINE EXPLORATION FUND.

---

Patron—THE QUEEN.

---

## *Quarterly Statement*

FOR 1872.



LONDON :

PUBLISHED AT THE SOCIETY'S OFFICE, 9, PALL MALL EAST,  
AND BY  
MESSRS. BENTLEY & SON, 8, NEW BURLINGTON STREET.

LONDON:  
R. K. BURT AND CO., PRINTERS,  
WINE OFFICE COURT, CITY.

## CONTENTS.

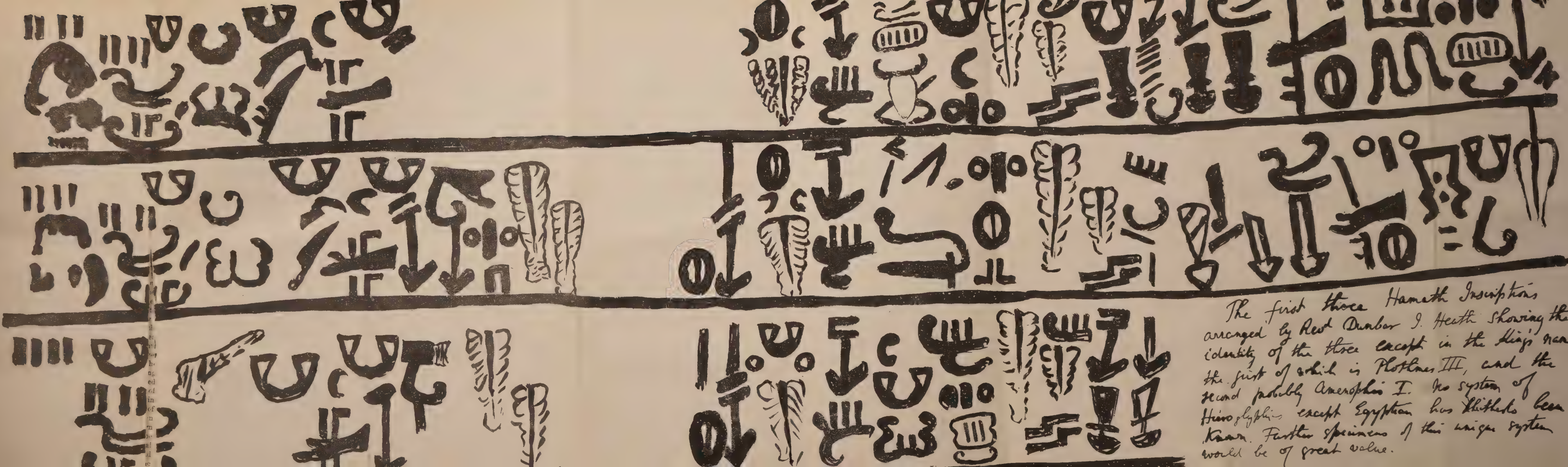
---

	PAGE
American Association, Letter from the Secretary of the . . . . .	31
Annual Meeting . . . . .	100
Arabic Names and Places. By Captain Warren . . . . .	123
East of Jordan, Expedition to. By Rev. A. E. Northey . . . . .	57
Glass, Analysis of. . . . .	31
Hamath Inscriptions . . . . .	74, 199
Knights of St. John, Church of the . . . . .	100
Jerusalem, Remarks on the Climate of. By Alexander Buchan . . . . .	19
——— Recent Discoveries at. By Captain Wilson . . . . .	47
Meteorological Papers. By James Glaisher, F.R.S. . . . .	73, 92
Notes. By Mr. Samuel Sharpe . . . . .	31
——— By Rev. J. Niel . . . . .	74
——— By Rev. Greville J. Chester . . . . .	122
Palestine Geography in the Seventeenth Century. By J. Eglington Bailey . . . . .	51
Palestine and the Cuneiform Inscriptions. By George Smith . . . . .	193



	PAGE
Survey of Palestine, Letters on the :—	
By Captain Burton . . . . .	3
By Lieut. C. R. Conder . . . . .	153
By Mr. C. F. Tyrwhitt Drake . . . . .	7, 36, 77, 174
By Mr. Grove . . . . .	1
By Rev. F. W. Holland . . . . .	6
By Captain Stewart . . . . .	32, 33
Temple, Tract on the Measurements of the . . . . .	12

---



The first three Hamath Inscriptions arranged by Rev. Dunbar I. Heath showing the identity of the three except in the King's name, the first of which is Pharaoh III, and the second probably Amenophis I. No system of Hieroglyphs except Egyptian has hitherto been known. Further specimens of this unique system would be of great value.



THE  
PALESTINE EXPLORATION FUND.

---

LETTERS ON THE SURVEY.

---

I.—FROM MR. GEORGE GROVE.

*Reprinted from the "Times."*

SIR,—It will be seen from your advertising columns that the Palestine Exploration Fund has just despatched its autumn expedition to the Holy Land, and I take the opportunity to explain what we are proposing to do, and to solicit the aid of the public in doing it. It is now proposed to make a complete and minute survey of the whole country west of the Jordan, from the extreme north to the extreme south of the Holy Land proper—"from Dan to Beersheba"—of the same nature with the Ordnance Survey of England and Wales. That is to say, not only will the natural features of the country be accurately mapped, but every town and village, every saint's tomb, every sacred tree or heap of stones, every spot, in short, to which a name is attached—and in Palestine a name is attached to nearly every irregularity of the soil—will be faithfully plotted in our map, and its name written down in Arabic by a competent Arabic scholar, wherever possible by the head man of the village or district, or some other native. Our survey will not only deal with the beaten tracks and frequented places, but will penetrate into those nooks and corners in the entangled hilly country which are never approached by ordinary travellers, but which form three-fourths of the Holy Land, and are as thickly sown with names as the parts along which every stranger passes. In this way alone can a map be obtained which shall answer the wants of modern Biblical topography and of the student anxious to understand the Bible in the thorough manner in which it is worthy to be understood. In some form or other, either of translation, or transference, or corruption, or allusion, there is reason to believe that most of the ancient names are embalmed in the modern ones, and the topography of the Old and New Testaments can never be satisfactorily adjusted, or its correspondence with that of the actual country be made manifest, till the modern names are discovered and recorded in the most ample and detailed manner. This, then, is the



immediate purpose of our present expedition. The archæological investigations recently so ably urged in the *Times* will by no means be neglected. On the contrary, they will receive careful attention. But at present they can only be subsidiary to the Survey, or, at any rate, the two must proceed *pari passu*. The basis of all investigation of a Country and a Book alike so curiously rich in topographical elements, is a thoroughly minute and exhaustive map; and, valuable as the archæology is, the Committee do not think themselves justified in preferring it to the Survey. But they have not left archæology out of their scheme, and they anticipate that, as in the Ordnance Survey of Great Britain and Ireland, a large amount of information on that head will be obtained through the observations of their surveyor.

The Government, always ready to assist the Fund by all means in its power, has been good enough to allow us to have the services of Captain Stewart, R.E., an officer of great experience in the English survey and that of Ceylon, and himself a skilful working photographer. He has already taken his departure with two sappers in whom we hope to see the admirable qualities of Sergeant Birtles and Sergeant Phillips reproduced. At Christmas Captain Stewart will be joined by Mr. Tyrwhitt Drake, already well versed in the language and habits of the East, and favourably known for his journey in the Wilderness of the Wanderings with Professor Edward H. Palmer, of Cambridge. An archæologist will follow as soon as the funds permit.

Captain Stewart will not remain in or near Jerusalem. The works there, necessarily relinquished by Captain Warren on his return to England, are under the charge of Dr. Chaplin, the able surgeon of the English Hospital. For the further prosecution of the investigations at Jerusalem, the Committee have other views, which I hope shortly to explain; but this part of our observations must be kept quite distinct from the survey. In the meantime, should anything special arise, Captain Stewart will be within easy reach of the Holy City, and can be quickly brought to the spot.

My readers will remark that I have spoken only of the west of the Jordan, and that for the very satisfactory reason that the survey of the eastern side has been undertaken by the American committee. At the instance of the Palestine Fund the subject has been taken up by the people of the United States with an earnestness and spirit which fully relieve us from all anxiety as to the successful accomplishment of their portion of the undertaking. This is only natural in the countrymen of Robinson and Lynch, but it is not the less gratifying, and it ought to stir us up to an honourable rivalry in a cause in which England has already done so much, and in which we must remain first in the field.

The time which the survey is estimated to take, from Captain Stewart's arrival to the delivery of the map, with lists, photographs, and drawings, to the Committee, is four years, and the estimated annual cost £3,000. The annual income on which the Committee of the Fund can depend is at present about £2,000, so that an additional annual sum of



£1,000 is required to carry on the survey, in addition to the works at Jerusalem and to the various collateral things which are constantly occurring.

I feel sure that our new undertaking will be well supported in Great Britain by those who have hitherto shown so lively and practical an interest in the exploration of Palestine. The present work is necessarily slow, but it is sure, and it has the advantage over archaeological researches that its results are not problematical, but certain. The objects with which it deals are not hidden hundreds of feet below the ground, to be searched for at hazard, but are open on the surface, where their appropriation is only a work of time. Nor are the ultimate results less certain. Those who give their money for the survey may rest assured that the map which will be handed to them at the close of the undertaking will contain the most definite solid aid obtainable for the elucidation of the most prominent of the material features of the Bible. Biblical research has now reached a point at which it cries out for a thoroughly accurate map as indispensable to its further existence. And this thing so much wanted can only be done by the combined efforts of private persons. No Government can undertake it. But the Committee of the Palestine Fund, comprising so many of the leading personages in Church and State, acting under the patronage of Her Majesty the Queen, and employing officers of the Royal Engineers of known skill and character, supplies a guarantee hardly inferior to the guarantee of Government that the work will be thoroughly done. I, therefore, confidently ask the aid which has never yet been refused to my appeals on behalf of this most important branch of investigation, which so peculiarly unites the claims and the interests of Science and Religion.

Your obedient servant,

GEORGE GROVE,

*Hon. Sec. Palestine Exploration Fund.*

November 7, 1871.

## II.—FROM CAPTAIN R. F. BURTON.

The return of Mr. C. F. Tyrwhitt Drake to Damascus on November 5, after his dangerous *reconnaissance* of the 'Ulah or uplands lying between the El Hamah (the Hamath of the Old Testament) and Aleppo, enables me to say a word for the cause lately advocated in your columns by the "Hon. Sec. Palestine Exploration Fund." My friend and fellow-traveller, during a journey of thirty-five days, averaging six miles of riding per diem, sketched and fixed the positions of some fifty ruins which, in presence of the Circassian immigration, now a *fait accompli*, are fated soon to disappear from the face of earth; he is also sending home twenty to twenty-five Greek inscriptions, of which six or seven have dates, and before joining Captain Stewart, R.E., he will

Get  
mon  
for su  
Get  
Map

explore the Harrah or Hot country, a pure white blank in the best maps, which, however, have not yet had the opportunity of being good. All except the hydrographic charts have been hurriedly executed; the bearings are mostly in confusion, and the proper names of places are hideously distorted. Let me offer, as a proof, the positions for Palmyra supplied to me by Mr. Stanford, of Charing Cross:

	Deg.	Min.	Sec.	Deg.	Min.	Sec.
1. Duc de Luynes' map; Lieut. Vigne's position . . . . .	N. lat. 34	32	30	E. lon. 38	14	39
2. Lieut.-Colonel Chesney's map, published by Walker . . . . .	N. lat. 34	15	00	E. lon. 38	35	00
3. Carl Ritter's map . . . . .	N. lat. 34	17	30	E. lon. 38	32	30
4. Major Rennell's map . . . . .	N. lat. 34	24	00	E. lon. 38	20	00

Here then the extremes of difference in latitude amount to seventeen miles, and in longitude to twenty miles, or a total of thirty-seven miles, in fact nearly thirty-eight; and it must be remembered that Palmyra lies within an easy four days' ride of Damascus.

Newly transferred to Syria and Palestine, I imagined—and many would do the same—my occupation as an explorer clean gone. The first few months, however, proved to me that although certain lines of transit have been well trodden, yet few travellers and tourists have ever ridden ten miles away from the high roads. No one, for instance, would suspect that so many patches of unvisited, and possibly at the time unvisitable country, lie within a day or two's ride of great cities and towns, such as Aleppo and Damascus, Hums and Hamah. When the maps have a virgin white in the heart of Jaydur, the classical Ituræa, students naturally conclude that the land has been examined and has been found to contain nothing of interest—the reverse being absolutely the case. Again, there are not a few who will scarcely have stomach for the task when they learn the reasons why these places have escaped European inspection, namely, that they will not afford provisions, forage, or water, or that they are infested by the Bedawin. The latter, indeed, compare favourably with the Klephts; they have not got to detain you for ransom or to threaten you with excision of the nose and ears unless your friends consent at once to pay the exorbitant demand; they will spear you a little, as they did a French Secretary of Legation at Athens who expected to put a Razzia to flight like monkeys by firing a revolver, but they will not kill you in cold blood except according to the strict *lex talionis*. Still, even under these mitigated circumstances, travellers, certain that an escort unless of overpowering numbers will at once turn tail, hardly care to expose themselves, their attendants, and their effects to a charge of Bedawin cavalry.

Again, the places have escaped exploration simply because the dragoman disliked them. Not a few readers, even professed geographers, would suppose that in describing the Anti-Libanus, as I propose to do, my task would be limited to filling up with minor details the correct

outlines traced by predecessors. The contrary is positively the case. Surprising as it may appear, it is still true that the best and truest modern maps—I bring no charge against the mappers—do not name a single valley north-east of Zebedáni, nor a single summit except the “Jebel el Halimah”—an utter misnomer. They show merely the long conventional caterpillar, flanked by the usual acidulated drops, and seamed with the normal thread of drainage; when they have disposed all this parallel with the Libanus, they have apparently done their duty. The traveller, with his handbook, perfectly ignores the fact that the general aspect of the range is far superior to that of the Western Sierra; that the colouring of the rock is richer; that the forms are more weird, savage, and picturesque; that the contrasts of shape and hue are sharper, and that the growth assumes in places the semblance of a thinned forest. As will presently appear, the range is in many points more remarkable than its maritime sister, and it may in fact be called a section of new ground in an old land.

Your correspondent (Nov. 7) has effectively pointed out the nature of the work required by the Bible lands proper, “from Dan to Beersheba,” where there is nothing barren of interest. It is to be hoped, however, that the funds will soon permit an archæologist to follow the surveyor. Although the East moves slowly, still she moves, but her present movement is all towards the change of ancient and Oriental to modern and European art, and in many places to the destruction of the most valuable remains of antiquity. The ruins of the ‘Ulah are being pulled to pieces in order to build houses for Hamah. The classical buildings of Saccæa are torn down and set up into rude hovels for the mountaineers who have fled from the Anti-Libanus and the Hermon. Patterns which possibly antedate the Pyramids are making way for cheap English calico prints. The porcelain sent from China is sold or stowed away, and the table is decked with bits of French stuff, all white and gold, and worth, perhaps, a franc a piece.

Allow me to conclude with again attempting to impress upon subscribers to the Palestine Exploration Fund that Syria, north of Palestine proper, is an old country, in more than one aspect, geographical and technological for instance, virtually new. A Land of the Past, it has a Future as promising as that of Mexico or of the Argentine Republic. The first railway that spans it will restore to rich and vigorous life the poor old lethargic region; it will raise this Lazarus of eastern provinces from his neglected grave. There is literally no limit that can be laid down to the mother-wit, to the ambition, and to the intellectual capabilities of its sons—they are the most gifted race that I have, as yet, ever seen. And when the curse shall have left the country, the plague-spot of bad rule, it will again rise to a position not unworthy of the days when it gave to the world a poetry and a system of religion still unforgotten by our highest civilisation.

RICHARD F. BURTON, F.R.G.S.

*Howlett's Hotel, December 14, 1871.*

## III.—FROM THE REV. F. W. HOLLAND.

*Reprinted from the "Guardian."*

SIR,—Three years ago you kindly inserted in your columns a letter from me asking for the help of the clergy and your other readers in carrying out the Ordnance Survey of the Peninsula of Sinai.

Owing in great measure to your assistance the necessary funds were collected, and the survey was brought to a successful issue.

May I again be allowed a little space to advocate the claims of a similar work, the survey of the Holy Land? The Committee of the Palestine Exploration Fund has already despatched an expedition for this purpose, consisting of Captain R. W. Stewart, R.E., and two non-commissioned officers selected from the staff of the Ordnance Survey. Mr. C. F. Tyrwhitt Drake, who is an experienced Eastern traveller, and a good Arabic scholar, is to join them, as soon as he has completed some explorations which he is now making in the country north-east of Damascus.

By this time Captain Stewart must have commenced his survey. Full details of his instructions are given in the last *Quarterly Statement* of the Palestine Fund. I will not, therefore, occupy your space by repeating them. Suffice it to say that the Government has approved of the survey, and has given every assistance in its power; and that no expense or trouble has been spared to render the organisation of the expedition as complete as possible.

Our main objects are to obtain an accurate map of the country west of the Jordan, on which, in addition to the topographical features, shall be laid down the positions of all towns, villages, ruins, roads, &c.; (the American Palestine Exploration Society, working side by side with us, will undertake the survey of the country lying on the east of the Jordan); to explore the mountains and hill-tops which formed generally the homes of the ancient inhabitants; to collect all existing traditions and names; and to search for and examine all remains of archæological interest.

Let it not be thought, however, that we have given up the intention of carrying on Captain Warren's work at Jerusalem. The Holy City must always remain the central point of interest; and no occasion will be lost of proceeding with the excavations there whenever any opportunity may occur which seems to promise decisive results. We shall always have an agent at Jerusalem, who will be in constant communication with Captain Stewart.

But for these explorations additional funds are required. The present income of the Society is not adequate for the work. We must have at least £1,000 a year more to carry on the work on its present scale; and it could be far more effectually and more cheaply done by the employment of a larger staff.

We appeal, then, for help to enable us to carry out this important undertaking to a successful completion. Surely we shall not appeal in



vain; for our object is not to establish this or that theory, but by throwing more light upon the Land of the Bible, to illustrate and explain the pages of the Bible itself.

F. W. HOLLAND, *Hon. Sec.*

November 27, 1871.

## LETTERS FROM MR. C. F. TYRWHITT DRAKE.

### I.

DAMASCUS, *June 11, 1871.*

I enclose a few of the inscriptions that I copied (in all about 120) in Jebel Druze Hauran. I have had no time to write out more of them. I was only there a few days, so did not collect so many as I hope to do on a second visit. Some of them have, I know, been already copied, but others were so covered with lichen that it was impossible to make anything out till I had cleaned them; others were concealed by plaster in the houses. From Jebel ed Druze, after much opposition from the Druzes at Shukka, who were afraid to accompany us and were ashamed of letting us go alone, we went to Umm Nirán (*Mother of Fires*), a curious cavern, partly natural and partly artificial, in the great volcanic outburst called El Wár. There are no ruins near it, and it is very curious, as water drips from the roof and the whole of the country above is an arid fiery waste of black lava. Thence we went to El Akir and other volcanic tells in the neighbourhood, thence to Bir Kasam, and afterwards to Jebel Dakweh. From these volcanoes, many of which are of considerable size, I was able to lay down the whole series of tells north of the Safa. From Jebel Dakweh we went to Dumeir, and just missed, by a few hours, a foray of one hundred horsemen and two hundred men on camels, who seem to have been dodging us for two days, but who missed us owing to our erratic course. They plundered Harran El Awamíd, and two neighbouring villages within half an hour's ride of a camp of six hundred Turkish soldiers.

In the Hauran we found the true source of the Leja (Tell Shiha), which seems to have been quite overlooked by previous travellers. Wetzstein's "great lava stream," from Jebel Kuleib (which we ascended) only exists on his map. Jebel Kuleib, *the turning-point*, not as Mr. Porter translates it, *the little heart*.

### II.

DAMASCUS, *June 29, 1871.*

Since I last wrote I have been to Hums and Hamah, and will now lay before you the results of my journey.

Hums (the ancient Emesa) is a town of great importance; the country



around it is very fertile, producing large quantities of grain. The manufactures, which chiefly consist of silk goods, are largely exported to Egypt and Abyssinia, and are justly valued. The silk is produced in the Nuséirí mountains, and is of good quality. The houses are built of mud or stone (the latter is chiefly basalt); and I found a large number of Greek inscriptions built into the walls, but as they were *invariably* broken (the better to serve for building purposes), I only copied a few as examples.

There is a large Christian population, consisting of 5,500 Greek orthodox and 1,500 Jacobites and other denominations. Of the churches belonging to the former, that of the forty martyrs is the most important; the apse is circular, and has a gigantic figure of the Virgin painted in it; the body of the church is modern, but constructed with columns, &c., taken from an older building. Tradition relates that the church was built by Justinian, but there is nothing to prove this in any part of the edifice as it now stands. The wood carving of the screen in front of the altar is handsome—the work of a Damascus artist about thirty years ago. The church in the Deir Mar Elyan (convent of St. Elias) was rebuilt about twenty-five years ago. Behind the altar, at the south-east corner, is the tomb of Mar Elyan, a handsome marble sarcophagus, whose length is 7ft. 6in., breadth, 3ft. 2½in., and height, 2ft. 5in., the cover being 2ft. 1in. more. At each corner of the lid, which is ridged, is a square pillar, surmounted by a round ball. There are two crosses at each side and one at each end, as well as one on each side of the lid, which was formerly clamped on in four places. The sarcophagus is in perfect preservation, and is said to have been originally brought from Russia. There are now no monks in the Deir, which is believed by the native Christians to be the earliest ever founded in the country.

The Syriac church was built only nine years ago, and contains nothing of interest.

The great mosque is called the Jami'a en Núrí, and was formerly a Christian church, dedicated to Mary, Mother of Light, whence the modern name En Núrí (Light). In the court of the mosque I observed a number of grey and red granite columns and a few mutilated capitals. To the south side of the mosque itself is a small dark chamber, where the head of John the Baptist is said to be buried. In restoring the mosque a few years ago, some bones were discovered under the pavement. As they exhaled a sweet odour, they were unanimously voted the bones of some saint, and were re-interred in the centre of the pillar to the north-west of the Mihrab. In this prayer-niche some mosaic has been used, relics of the former building.

The Madnet Meshed, or, as it is frequently called, Madnet Sheikh Hammed (Minaret of Sheikh Hammed), is considered by the natives of great antiquity. It is merely a square tower of black basalt, divided externally by cornices into four stories, and ascended internally by a staircase built round, and square centre, and terminating at top in a chamber floored with basalt slabs. The roof has disappeared, as have

many portions of the staircase, which renders the ascent somewhat difficult. I enclose the copy of an inscription on the outside.

There are many ornamented sarcophagi in the town used as water troughs, &c., and are called by the people Rasd (pl. arsad), and are named from some fancied likeness in the patterns to beasts and birds, as the Rasd el'Akrab (scorpions), near the Bab es Suk, el Afá'í (snakes), and el Haiyát (snakes), &c. I found, however, nothing but wreaths and conventional patterns sculptured upon them.

I was continually being taken off to see inscriptions in Hebrew or some unknown character, but they always turned out to be Cufic—generally very badly written—or, as in one case, a very conventional pattern of grapes and vine leaves. Many of the existing fragmentary inscriptions have been brought from neighbouring ruins. This fact, combined with their mutilated state, renders them of little, if any, value.

The Kala (fortress) is most conspicuous and interesting. It consists of an oval mound about 100ft. high, and surrounded by a moat some 25ft. in depth, which is still perfect towards the west and south-west. The outer casing of the mound is Saracenic, and consists of a mass of masonry from five to eight feet thick, bound together with mortar, and faced with small squares of basalt. Pillars of basalt and limestone, taken from a former building, are used as ties. In some places, as at the south-east, where this outer casing has been destroyed, two other, and of course more ancient, escarpments appear: these are built of limestone (conglomerate). A considerable portion of the upper part of the mound appears to be formed of made earth, as I noticed beneath the innermost casing layers of ashes and burnt soil, as well as a few fragments of pottery. To the north-east some portions of a well-built wall of white limestone are visible, and these Captain Burton considers to be remains of the well-known Temple of the Sun. There being no other elevated ground in the neighbourhood of Hums, this supposition is rendered extremely probable, which is confirmed by local tradition. To the west of the Kala are ruins of a handsome Roman brick tower, in good style, ornamented exteriorly with pilasters, cornices, and diaper work, executed in basalt and limestone.

The only ancient tomb I found was to the south-east of the Kala. The excavated chamber was filled up with rubbish, but was described to me by a man who had seen it as containing six loculi formed of slabs of stone, arranged three on each side. A flight of steps descend to a stone door, from which a passage, covered with slabs of basalt, led to the chamber. With the exception of the door, the other stones have been displaced, and are being carried away for building purposes. I found a few fragments of glass near his tomb.

From Hums to Hamah the distance is about twenty-one miles; the road passes Restán (*Arethusa*), where the ruins are interesting as showing the dispositions of the streets very clearly. Excavations here would probably be productive. I did not find any inscriptions, and all

antiques or coins are taken to Hums and Hamah, where they are bought up by the Christian silversmiths, who as a class are such consummate liars and cheats, and consider all engraved stones and coins of such unknown value, that it is almost impossible to deal with them.

Hamah, a much larger town than Hums, is situated in a depression not unlike a vine leaf in shape, on the banks of the 'Assy (Orontes). A mound similar to that at Hums, but larger, marks the site of the ancient Kala, and stands on the south bank of the river. All the stones have been taken away for building purposes, but to the east, masses of rubble and sun-dried bricks are still visible.

One of the most striking features of Hamah are the Ná'úrahs, water-wheels from twenty to seventy-five feet in diameter, intricate edifices of timber which, by means of boxes round the edge, throw the water into aqueducts which irrigate the gardens. Each Ná'úrah belongs to a company, who keep it in repair. The creaking of these huge machines, which spill as much water as they lift, is ceaseless, and monotonously discordant. In all there are about twenty of them; the principal one is the Mohammedíyeh, to the west of the Kala. El Khudúrah is also large. To the south-east of the Kala are El Jisriyeh on the north-east, and El Mamúríyeh on the south-west bank. The current of the Orontes is strong and very deep. Fish are plentiful.

El Jami'a el Kibír (the great mosque) was originally a Christian church. There is a Greek inscription over one of the windows (seemingly a sister one to that which now forms the altar of St. Michael in the Greek church of the Blessed Virgin) and another long inscription is said to be covered with plaster in the interior of the building. The mosque has two rows of four pillars each; the nave has three domes, and there is another over the Mihrab; the aisles and ends of the nave are vaulted. On the outside a flat projecting cornice is supported by heavy corbels. In the courtyard there is a small dome (similar to that which contains the books in the great mosque at Damascus) supported on eight pillars, with acanthus capitals.

Many of the mosque towers are in good taste; the reddish yellow limestone and black basalt are well contrasted in artistic patterns.

The Greek orthodox Christians here number about 200 men (*i.e.* houses), and there are a few Jacobites. The churches contain little of interest. The colony of Jews was driven out some fifty or sixty years ago, on account of the disappearance of a Turkish girl in their quarter, and have never been allowed to return. I visited their cemetery, and have copied the solitary inscription there which seems to have been over the entrance to an excavated place of burial. This cemetery, Kabúr el Yehúd, lies about one mile north-west of the town on the plateau. The cliffs between it and the town are full of caves, now used as dwellings and storehouses. All that I saw seemed originally made for those purposes, and not for sepulchres.

To the south of the town a deep fosse is cut on the edge of the

plateau, only leaving room for two or three rows of houses. There are traces here of the old wall.

My primary object, of course, in visiting Hamah was to examine the hieroglyphic inscriptions, and hearing that fabulous prices had been asked by the owners, I was exceedingly cautious, and spoke to no one about them, but waited till they were shown to me, which occurred on the second day of my stay there. I then endeavoured to eradicate the idea of great value, and I hope succeeded to a great extent. The next day I took squeezes and photographs. The former are good, but the latter, owing to an accident to my baggage animal, are not successful. I hope, however, to return to Hamah before the autumn, when I shall take plaster casts and other photographs.

---

### III.

SALAHYIEH, DAMASCUS, *Sept. 30, 1870.*

I start to-morrow upon a journey into North Syria, which will probably occupy me a month or five weeks' hard riding. I intend, if not effectually stopped by the Bedawin, to push as far as Rusáfa, on the Euphrates; here there is an enormous castle about which the Bedawin tell me marvellous stories, and, as far as I can make out, no European has ever approached it. On returning I shall visit the 'Ulah, to the east and north-east of Hamah, where 365 ruined towns are said to exist; they are full of Greek inscriptions, and resemble in architecture the so called Giant Cities of Bashan, *i.e.*, they are of the Beni Ghassan type.

C. F. TYRWHITT DRAKE.

---

NOTE.—By the latest intelligence received, Mr. Drake has returned to Damascus, after passing through the Ulah to Aleppo. The Ulah (uplands) begins on a parallel east of Hamah, the ancient Hamath. It is marked in some of our maps as the Great Syrian Desert, an unfortunate misnomer, as it is a region exceptionally *riant* and fertile. Unfortunately, the Bedawin have been allowed to harry the country, and consequently the 360 towns which once existed there are now all in ruins. The extensive immigration of Circassians which has recently taken place will also tend further to the destruction of these remains. It is, therefore, gratifying to add that Mr. Drake has returned laden, not only with sketches, plans, measurements, but also with Greek inscriptions, of which there are a great number lying about. These would, of course, if left uncopied, soon have perished with the stones on which they are inscribed.



## THE TRACT "MIDDOTH"—ON THE MEASUREMENTS OF THE TEMPLE.\*

LITERALLY TRANSLATED FROM THE MISHNA.

I. The priests guarded the sanctuary in three places—in the House Abtinat,† in the House Nitzus,‡ and in the House Moked;§ and the Levites in twenty-one places, five at the five gates of the Mountain of the House, four at its four corners inside, five at the five gates of the court, four at its four corners outside, and one in the chamber of the offering, and one in the chamber of the vail, and one behind the house of Atonement.

II. The captain of the Mountain of the House went round to every watch in succession with torches flaming before him; and to every guard who did not stand forth the captain said, "Peace be to thee." If it appeared that he slept, he beat him with his staff, and he had permission to set fire to his cushion. And they said, "What is the voice in the court?" "It is the voice of the Levite being beaten, and his garments burned, because he slept on his guard." Rabbi Eliezer, the son of Jacob, said, "Once they found the brother of my mother asleep, and they burned his cushion."

III. There were five gates to the Mountain of the House—two Huldah gates in the south which served for going in and out; Kipunus in the west served for going in and out; Tadi|| in the north served for no ordinary purpose. Upon the east gate was portrayed the city Shushan. Through it, one could see the high priest who burned the heifer, and all his assistants going out to the Mount of Olives.

IV. In the court were seven gates—three in the north, and three in the south, and one in the east. That in the south was called the gate of flaming; the second after it the gate of offering; the third after it the water-gate; that in the east was called the gate Nicanor. And this gate had two chambers, one on the right and one on the left. One the chamber of Phineas the vestment keeper, and the other the chamber of the pancake maker.

V. And at the gate Nitzus on the north was a kind of cloister with a room built over it where the priests kept ward above and the Levites below; and it had a door into the Chel.¶ Second to it was the gate of the Offering; third, the House Moked.

VI. In the House Moked were four chambers opening as small apartments into a saloon—two in the holy place and two in the unconsecrated place; and pointed rails separated between the holy and the unconsecrated. And what was their use? The south-west chamber was the chamber for the offering; the south-east was the chamber for the shew bread; in the north-east chamber the children of the

\* Reprinted in Jerusalem, 1867, and presented to the Fund by Capt. Warren.

† A famous maker of incense. ‡ Sparkling. Burning. || Obscurity

¶ Platform, or rampart.



Asmoneans deposited the stones of the altar which the Greek kings had defiled. In the north-west chamber they descended to the house of baptism.

VII. To the House Moked were two doors—one open to the Chel, and one open to the court. Said Rabbi Judah, “The one open to the court had a wicket through which they went in to sweep the court.”

VIII. The House Moked was arched, and spacious, and surrounded with stone divans, and the elders of the Courses slept there with the keys of the court in their hands; and the young priests each with his pillow on the ground.

IX. And there was a place a cubit square with a tablet of marble, and to it was fastened a ring, and a chain upon which the keys were suspended. When the time approached for locking, the priest lifted up the tablet by the ring, and took the keys from the chain and locked inside, and the Levite slept outside. When he had finished locking, he returned the keys to the chain, and the tablet to its place—laid his pillow over it and fell asleep. If sudden defilement happened, he rose and went out in the gallery that ran under the arch, and candles flamed on either side until he came to the house of baptism. Rabbi Eleazer the son of Jacob says: “In the gallery that went under the Chel he passed out through Tadi.”

#### OUR BEAUTY BE UPON THEE IN THREE PLACES.

I. The Mountain of the House was five hundred cubits square. The largest space was on the south, the second on the east, the third on the north, and the least westward. In the place largest in measurement was held most service.

II. All who entered the Mountain of the House entered on the right-hand side, and went round, and passed out on the left; except to whomsoever an accident occurred he turned to the left. “Why do you go to the left?” “I am in mourning.” “He that dwelleth in this house comfort thee.” “I am excommunicate.” “He that dwelleth in this house put in thy heart repentance, and they shall receive thee.” The words of Rabbi Mayer, to him said Rabbi Jose, “Thou hast acted as though they had transgressed against him in judgment; but, may He that dwelleth in this house put in thy heart that thou hearken to the words of thy neighbours, and they shall receive thee.”

III. Inside of the Mountain of the House was a reticulated wall ten handbreadths high; and in it were thirteen breaches broken down by the Greek kings. The Jews restored, and fenced them, and decreed before them thirteen acts of obeisance. Inside of it was the Chel ten cubits broad, and twelve steps were there. The height of each step was half a cubit, and the breadth half a cubit. All the steps there were in height half a cubit, and in breadth half a cubit, except those of the porch. All the doors there were in height twenty cubits, and in breadth ten cubits, except that of the porch. All the gateways there had doors, except that of the porch. All the gates there had lintels,

except Tadi; there two stones inclined one upon the other. All the gates there were transformed into gold, except the gate Nicanor, because to it happened a wonder, though some said "because its brass glittered like gold."

IV. And all the walls there were high, except the eastern wall, that the priest who burned the heifer might stand on the top of the Mount of Olives and look straight into the door of the sanctuary when he sprinkled the blood.

985 V. The court of the women was one hundred and thirty-five cubits in length, by one hundred and thirty-five in breadth. And in its four corners were four chambers, each forty cubits square, and they had no roofs; and so they will be in future, as is said, "Then he brought me forth into the utter court, and caused me to pass by the four corners of the court; and, behold, in every corner of the court there was a court."\* In the four corners of the court there were courts smoking, yet not smoking, since they were roofless. And what was their use?—the south-east one was the chamber of the Nazarites, for there the Nazarites cooked their peace-offerings, and polled their hair, and cast it under the pot. The north-east was the chamber for the wood, and there the priests with blemishes gathered out the worm-eaten wood. And every stick in which a worm was found, was unlawful for the altar. The north-west was the chamber for the lepers. The south-west? Rabbi Eleazar, the son of Jacob, said: "I forget for what it served." Abashaul said, "There they put wine, and oil." It was called the chamber of the house of oil. And it was open at first and surrounded with lattice work, that the women might see from above, and the men from beneath, lest they should be mixed. And fifteen steps, corresponding to the fifteen steps in the Psalms, ascended from it to the court of Israel, upon them the Levites chanted. They were not angular, but deflected like the half of a round threshing-floor.

Steps VI. And under the court of Israel were chambers open to the court of the women. There the Levites deposited their harps, and psalteries, and cymbals, and all instruments of music. The court of Israel was 995 one hundred and thirty-five cubits long, and eleven broad; and likewise the court of the Priests was one hundred and thirty-five cubits long, and eleven broad. And pointed rails separated the court of Israel from the court of the Priests. Rabbi Eleazar, the son of Jacob, said: "There was a step a cubit high, and a daïs placed over it; and in it were three steps each half a cubit in height." We find that the Priests' court was two and a half cubits higher than the court of Israel. The whole court was one hundred and eighty-seven cubits in length, and one hundred and thirty-five cubits in breadth, and the thirteen places for bowing were there. Abajose, the son of Chanan, said: "In front of the thirteen gates." In the south near to the west were the 1000 upper gate—the gate of flaming, the gate of the first-born—the water-gate. And why is it called the water-gate?—because through it they

\* Ezekiel xlv. 21.

bring bottles of water for pouring out during the feast of tabernacles. Rabbi Eleazar, the son of Jacob, said: "Through it the water returned out, and in future it will issue from under the threshold of the house." And opposite them in the north near to the west the gate of Jochania—the gate of the offering, the gate of the women, the gate of music. And "why was it called the gate of Jochania"?—"because through it Jochania went out in his captivity." In the east was the gate Nicanor and in it two wickets, one on the right, and one on the left, and two in the west, which were nameless.

#### OUR BEAUTY BE UPON THEE, O MOUNTAIN OF THE HOUSE.

I. The altar was thirty-two cubits square. It ascended a cubit and receded a cubit. This was the foundation. It remains thirty cubits square. It ascended five cubits, and receded one cubit. This is the circumference. It remains twenty-eight cubits square. The place for the horns was a cubit on either side. It remains twenty-six cubits square. The place of the path for the feet of the priests was a cubit on each side. The hearth remains twenty-four cubits square. Rabbi Jose said: "At first it was only twenty-eight cubits square." It receded, and ascended until the hearth remained twenty cubits square; but when the children of the captivity came up, they added to it four cubits on the north, and four cubits on the west like a gamma, it is said; and the altar was twelve cubits long by twelve broad, being a square. One could say it was only "a square of twelve"\* as is said. Upon its four sides we learn that it measured from the middle twelve cubits to every side. And a line of red paint girdled it in the midst to separate the blood above from the blood below. And the foundation was a perfect walk along the north side, and all along on the west, but it wanted in the south one cubit, and in the east one cubit.

II. And in the south-western corner were two holes as two thin nostrils, that the blood poured upon the western and southern foundation should run into them; and it commingled in a canal, and flowed out into the Kidron.

III. Below in the plaster in the same corner there was a place a cubit square, with a marble tablet, and a ring fastened in it. Through it they descended to the sewer, and cleansed it. And there was a sloping ascent to the south of the altar thirty-two cubits long by sixteen broad. In its western side was a closet where they put the birds unmeet for the sin offering.

IV. Either the stones of the sloping ascent, or the stones of the altar, were from the Valley of Bethcerem.† And they digged deeper than virgin soil, and brought from thence perfect stones over which iron was not waved. For the iron defiles by touching. And a scratch defiles everything. In any of them a scratch defiled, but the others were lawful. And they whitewashed them twice in the year, once at

\* Ezekiel xliii. 16.

† House of the Vineyard.

the Passover, and once at the feast of tabernacles. And the sanctuary was whitewashed once at the Passover. The rabbi said "every Friday evening they whitewashed them with a mop on account of the blood." They did not plaster it with an iron trowel "mayhap it will touch and defile." Since iron is made to shorten the days of man, and the altar is made to lengthen the days of man. It is not lawful that what shortens should be waved over what lengthens.

V. And there were rings to the northern side of the altar, six rows of four each, though some say four rows of six each. Upon them they slaughtered the holy beasts. The slaughter house was at the north side of the altar, and in it were eight dwarf pillars with a beam of cedar wood over them. And in them were fastened iron hooks—three rows to each pillar; upon them they hung up the bodies; and skinned them upon marble tables between the pillars.

VI. The laver was between the porch and the altar, but inclined more to the south. Between the porch and the altar were twenty-two cubits, and there were twelve steps; the height of each step was half a cubit, and its breadth a cubit—a cubit—a cubit—a landing three cubits—a cubit—a cubit, and a landing three cubits; and the upper one a cubit—a cubit, and the landing four cubits. Rabbi Jehudah said "the upper a cubit—a cubit, and the landing five cubits."

VII. The doorway of the porch was forty cubits high, and twenty broad; over it were five carved oak beams. The lower one extended beyond the doorway a cubit on either side; the one over it extended a cubit on either side. It results that the uppermost was thirty cubits, and between each one there was a row of stones.

VIII. And stone buttresses were joined from the wall of the sanctuary to the wall of the porch, lest it should bulge; and in the roof of the porch were fastened golden chains upon which the young priests climbed up, and saw the crowns; as is said, "and the crowns shall be to Helem, and to Tobijah, and to Jedaiah, and to Hen the son of Zephaniah, for a memorial in the temple of the Lord."\* And over the doorway of the sanctuary was a golden vine supported upon the buttresses. Every one who vowed a leaf, or a berry, or a cluster he brought it and hung it upon it. Said Rabbi Eleazar, the son of Zadok, "it is a fact, and there were numbered three hundred priests to keep it clear."

#### OUR BEAUTY BE UPON THEE, O ALTAR.

I. The doorway of the sanctuary was twenty cubits in height, and ten in breadth, and it had four doors—two within and two without, as is said—"two doors to the temple and the holy place."† The outside doors opened into the doorway to cover the thickness of the wall, and the inside doors opened into the sanctuary to cover the space behind the doors, because the whole house was overlaid with gold, excepting behind the doors. Rabbi Judah said, "they stood in the middle of the

\* Zechariah vi. 14.

† Ezekiel xli. 23.



doorway and like a pivot these folded behind them two cubits and a half; and those two cubits and a half. Half a cubit and a jamb on this side, and half a cubit and a jamb on the other side." It is said "two doors to two doors folding back—two leaves to one door and two leaves to the other."\*

II. And the great gate had two wickets—one in the north, and one in the south. Through the one in the south no man ever entered; and with regard to it Ezekiel declared—as is said—"The Lord said unto me, This gate shall be shut, it shall not be opened, and no man shall enter in by it, because the Lord, the God of Israel, hath entered in by it, therefore it shall be shut."† The priest took the key and opened the wicket, and went in to the little chamber, and from the chamber to the sanctuary. Rabbi Judah—"he went in the thickness of the wall until he found himself standing between the two gates, and he opened the outside gates from inside, and the inside from outside."

III. And there were thirty-eight little chambers, fifteen in the north, fifteen in the south, and eight in the west. The northern and southern ones were placed five over five, and five over them; and in the west three over three and two over them. To each were three doors. One to the little chamber to the right, one to the little chamber to the left, and one to the little chamber over it. And in the north-eastern corner were five gates, one to the little chamber on the right and one to the little chamber over it, and one to the gallery, and one to the wicket, and one to the sanctuary.

IV. The lowest row was five cubits, and the roofing six cubits, and the middle row six and the roofing seven, and the upper was seven—as is said, "the nethermost chamber was five cubits broad, and the middle six cubits broad, and the third seven cubits broad."‡

V. And a gallery ascended from the north-eastern corner to the south-western corner. Through it they went up to the roofs of the little chambers. One went up in the gallery with his face to the west. So he proceeded all along the northern side till he reached the west. On reaching the west he turned his face southward going along the west side till he reached the south. On reaching the south with his face to the east he went along the south side till he arrived at the door of the upper story, because the door of the upper story opened in the south side; and at the door of the upper story were two cedar beams. By them they went up to the roof of the upper story, and on its summit rails separated between the holy and the holy of holies; and in the attic trapdoors opened to the holy of holies. Through them they let down the workmen in boxes, lest they should feast their eyes in the holy of holies.

VI. The sanctuary was a square of one hundred cubits, and its height one hundred. The foundation six cubits, and the height of the wall forty cubits, and the string course§ one cubit, and the rain

\* Ezekiel xli. 24.

† xliv. 2.

‡ 1 Kings vi. 6.

§ Curiously graven and gilt.



channel two cubits, and the beams one cubit, and the covering plaster one cubit; and the height of the upper story was forty cubits, and the string course one cubit, and the rain channel two cubits, and the beams one cubit, and the covering plaster one cubit, and the battlement three cubits, and the scarecrow one cubit. Rabbi Judah said "the scarecrow was not counted in the measurement, but the battlement was four cubits."

VII. From east to west were one hundred cubits. The wall of the porch five, and the porch eleven, and the wall of the sanctuary six, and the interior forty, and the partition space between the vails one, and the holy of holies twenty cubits; the wall of the sanctuary was six, and the little chamber six, and the wall of the little chamber five. From north to south were seventy cubits. The wall of the gallery five, the gallery three, the wall of the little chamber five, the little chamber six, the wall of the sanctuary six, its interior twenty; the wall of the sanctuary six, the little chamber six; the wall of the little chamber five, the place for the descent of the water three, and the wall five cubits. The porch was extended beyond it fifteen cubits in the north, and fifteen in the south; and this space was called "the house of the instruments of slaughter," because the knives were there deposited. And the sanctuary was narrow behind and broad in front and it was like a lion, as is said, "Ho! Ariel the city where David dwelt,\* as a lion is narrow behind and broad in front, so the sanctuary is narrow behind and broad in front."

#### OUR BEAUTY BE UPON THEE, DOOR OF THE SANCTUARY.

I. The length of the whole court was one hundred and eighty-seven cubits; the breadth one hundred and thirty-five. From east to west one hundred and eighty-seven. The place for the tread of the feet of Israel was eleven cubits; the place for the tread of the priests eleven cubits; the altar thirty-two; between the porch and the altar twenty-two cubits; the temple one hundred cubits; and eleven cubits behind the House of Atonement.

II. From north to south one hundred and thirty-five cubits; from the sloping ascent to the altar sixty-two; from the altar to the rings eight cubits; the space for the rings twenty-four; from the rings to the tables four; from the tables to the pillars four; from the pillars to the wall of the court eight cubits. And the remainder lay between the sloping ascent and the wall and the place of the pillars.

III. In the court were six chambers—three in the north and three in the south. In the north the chamber of salt—the chamber of Parva—the chamber of washers. In the chamber of salt they added salt to the offering; in the chamber of Parva they salted the skins of the offering; and upon its roof was the house of baptism for the high priest on the day of atonement. In the chamber of washers they cleansed the inwards of the offerings; and from thence a gallery extended up to the top of the house of Parva.

\* Isaiah xxix. 1.

IV. In the south were the chamber of wood—the chamber of the captivity—and the chamber of hewn stone. The chamber of wood—said Rabbi Eleazar the son of Jacob, “I forget for what it served.” Abashaul said, “the chamber of the high priest was behind them both, and the roof of the three was even. In the chamber of the captivity was sunk the well with the wheel attached to it, and from thence water was supplied to the whole court. In the chamber of hewn stone the great sanhedrim of Israel sat, and judged the priesthood, and the priest in whom defilement was discovered clothed in black and veiled in black went out and departed; and when no defilement was found in him clothed in white and veiled in white he went in and served with his brethren the priests. And they made a feast-day because no defilement was found in the seed of Aaron the priest, and thus they said “Blessed be the place; blessed be he since no defilement is found in the seed of Aaron; and blessed be He who has chosen Aaron and his sons to stand and minister before the Lord in the house of the Holy of Holies.”

OUR BEAUTY BE UPON THEE, WHOLE COURT; AND COMPLETION TO  
THEE, TRACT MEASUREMENTS.

NOTE.—The Committee are not responsible for the accuracy of the above translation, which is printed *verbatim* from the pamphlet presented by Captain Warren.

## REMARKS ON THE CLIMATE OF JERUSALEM.\*

FROM OBSERVATIONS MADE BY DR. THOMAS CHAPLIN, FOR THREE  
YEARS AND FOUR MONTHS, BEGINNING 1ST NOVEMBER, 1863,  
AND ENDING 28TH FEBRUARY, 1867.

Lat. 31° 46' 45" N.; Long. 35° 13' 0" E.; Height above the Sea,  
2,500 feet. Hour of Observation, 9 a.m.

BY ALEXANDER BUCHAN, SECRETARY TO THE SCOTTISH  
METEOROLOGICAL SOCIETY.

WHILE on a tour through Palestine in the spring of 1863, Dr. Keith Johnston, the Society's honorary secretary, made arrangements with Dr. Thomas Chaplin for making meteorological observations at Jerusalem. The Board of Trade most cordially co-operated with the Society in the supply of instruments, and forwarded to Dr. Chaplin first two standard barometers, and then other two to replace the former ones, which had been broken, or otherwise rendered useless. All the instruments sent were verified. The thermometers have been kept in a louver-boarded box of the pattern designed by Mr. Thomas Stevenson, C.E., and in extensive use among the Society's observers. Thus

\* Reprinted by permission from the *Journal of the Scottish Meteorological Society*. A second *resumé* of Dr. Chaplin's observations for this society is in process of preparation, and has been also kindly promised for this journal.

every care was taken to procure observations of the most trustworthy description. The observations commenced in November, 1863, and have been uninterruptedly carried on since. They are made daily at 9 a.m. Abstracts of two years' observations accompany this paper, in Table I., in continuation of previous abstracts. And in Table II. are given, for each month and for the year, the means and extremes calculated on an average of the three and one-third years during which the observations have been carried on,—a space of time sufficient to furnish materials for a first and close approximation to the climate of that interesting country.

### ATMOSPHERIC PRESSURE.

The mean annual pressure of the atmosphere, reduced to  $32^{\circ}0$ , is 27·391 inches. There is one maximum and one minimum period in the year; the maximum occurring in January, when the mean pressure is 27·451; and the minimum in July, when it is 27·278. Thus the difference between the months of greatest and least mean pressure is 0·113 inches. At the level of the sea the difference between the months of extreme pressure would be much greater, because in summer the atmosphere is increased in volume by the higher temperature, and consequently a considerable part of it is thrust up above such elevated stations as Jerusalem (2,400 feet), thus increasing the summer pressure. Reducing the monthly averages to sea level, the annual mean pressure is 30·052 inches,—the maximum 30·211 in January, and the minimum 29·870 in July; thus giving a difference of 0·341 between the highest and lowest monthly pressures.

The highest mean pressure, reduced to  $32^{\circ}0$  only, of any of the forty months, was 27·507 in February 1867, and the lowest 27·267 in July 1867; or, reduced to sea-level, 30·296 and 29·860 respectively, thus giving, in the latter case, a difference of 0·436.

The highest single reading that has been observed was 27·680, and it occurred on the 13th January, 1866; and the lowest 26·914, occurring with a severe thunderstorm and heavy rainfall on the 3rd February, 1865. The difference between these extremes is 0·766. The highest reading during the two hottest months, July and August, was 27·395 in August 1865, and the lowest 27·167 in July 1865, the difference being 0·228.

The greatest monthly range occurs in February, being 0·482; in Scotland the greatest occurs also in February, but it is very much greater, being 1·557. The least monthly range occurs in July, when it is only 0·149; in Scotland in the same month it is 0·897. These figures represent very well the average state of the atmosphere in both countries—the disturbed condition of the atmosphere in the one being the accompaniment of fickle and capricious weather, while in the other the weather is comparatively constant and uniform, and the atmosphere is subject to little variation.

It will be observed that the relations between pressure and tem-

perature are very intimate. The pressure is highest during the coldest months; it thence continues to fall as the temperature rises to the lowest point in the warmest month, and then rises as the temperature falls till it again reaches the maximum in the coldest month. This points out clearly that the atmospheric pressure in Palestine is regulated principally by the annual march of the temperature of the air. The following are the mean pressures for January and July at several places in Asia, reduced only to  $32^{\circ}0$ :—Beyrout, 29·897 and 29·535; Astrachan, 30·206 and 29·599; Barnaul, 29·816 and 29·117; Irkutsk, 28·774 and 28·187; Pekin, 30·244 and 29·470; Calcutta, 30·101 and 29·409; and Aden, 29·823 and 27·482. These low summer pressures are caused by the circumstance that the continent of Asia and eastern Europe is at this season heated to a degree much exceeding the temperature of all adjoining regions; consequently from it, as from a furnace, heated air ascends and flows over into neighbouring regions, and thus the pressure over the heated district is diminished. And as in winter the temperature of the same district is very low, the air, being condensed by the cold, settles there, or is stored up during these months, and the pressure is consequently very high. It follows that the nearer we approach the centre of this vast plain, the greater is the difference between the summer and winter pressures. It is the geographical position of Palestine, in reference to this region, with its extremes of temperature and pressure, which furnishes the key to its climate.

In Scotland, on the other hand, the maximum pressure happens in spring, when the polar current is passing over the country on its way to the south; and the pressure is depressed below the average, not during the warm months, but during the *rainy months* of the year. The two causes which bring about a diminution of atmospheric pressure are, 1st, An increase in the temperature of the air over an extensive region, so as to raise it considerably over that of surrounding districts; 2nd, Or an increase in the rainfall over an extensive space of the earth's surface; so that, by the heat disengaged from the vapour when condensed into rain, the temperature of the atmosphere is raised, and the pressure is still further diminished by the quantity of vapour present in the atmosphere. When both causes conspire, that is, when the highest temperature and the greatest rainfall occur in the same months, as in Hindostan and China, the difference between the summer and winter pressure is very great.

On the other hand, the rainfall in Palestine occurs during the winter months, or during the months of greatest pressure. It must not, however, be inferred from this coincidence that the height of the barometer is not influenced by the rainfall, the contrary being the case. I have carefully compared the rainfall during the forty months with the state of the barometer at the time, and find that the barometer fell before or during the rain in every case, except one or two, when the fall of rain happened to be slight. Not only so, but for some time at the com-



mencement and at the end of the dry season, when no rain falls, and the sky is seldom for any length of time perfectly free of clouds, it frequently occurs that the barometer falls more or less, when thundery-looking but rainless clouds appear, when cumulus clouds sail slowly past, and even when the delicate cirrus is pencilled on the deep blue sky. But during the rainless months, when no cloud is seen for many weeks, the variations of the barometer fall to a minimum.

In this country a fall of the barometer to the extent of two or three tenths of an inch below the average, does not necessarily imply any change of weather; but in Palestine a fall of two-tenths of an inch portends a storm of wind and rain, or a thunderstorm of some magnitude.

#### TEMPERATURE.

The mean annual temperature at Jerusalem is  $63^{\circ}4$ . Hence, if  $1^{\circ}0$  be allowed for every 300 feet in elevation, the mean temperature near the level of the sea would be about  $71^{\circ}7$ , which is about  $1^{\circ}7$  higher than is laid down in Dove's chart of the isothermals of the globe; but since the lines in that part of the earth are laid down from very meagre data, they probably require some slight alteration.

The highest mean monthly temperature is  $76^{\circ}2$  in August, and the lowest  $47^{\circ}2$  in January, which gives a difference of  $29^{\circ}0$  between the hottest month and the coldest month. The temperature of February is nearly as low as that of January; and that of July nearly as high as August. The temperature of March is  $58^{\circ}4$ , and April,  $59^{\circ}8$ , both months having thus nearly the same temperature; September  $72^{\circ}2$ , and October  $71^{\circ}8$ , are also nearly alike. Also, the temperature of December,  $49^{\circ}9$ , comes near that of January and February, the two coldest months; and the temperature of June,  $73^{\circ}0$ , near that of the two warmest months which follow. The great annual increase in the temperature takes place from February to March,  $48^{\circ}8$  to  $54^{\circ}4$ ; and from April to May,  $59^{\circ}8$  to  $67^{\circ}8$ . And the great annual fall of the temperature from October to November,  $71^{\circ}8$  to  $61^{\circ}0$ ; and November to December,  $61^{\circ}0$  to  $49^{\circ}9$ .

This singular distribution of the temperature through the months of the year, so different from what is observed in Great Britain, will no doubt be somewhat modified when the average is made for a greater number of years; but as in each successive year this remarkable partition of the temperature has been pretty constantly maintained, the presumption is, that any such modification will be slight.

The increase from February to March is chiefly brought about by the higher temperature of the day. Thus, while the temperature of the night only increases from  $42^{\circ}3$  to  $49^{\circ}4$ , or  $7^{\circ}2$ , that of the days increases from  $55^{\circ}4$  to  $67^{\circ}5$ , or  $12^{\circ}1$ . This increase is therefore caused by the greater strength of the sun's rays, which is still further increased by the gradual cessation of the rainfall, and the consequent clearing of the sky from clouds.



In May, when the sky may be considered as now cleared of clouds altogether, the next great increase of temperature takes place, which, as in the previous case, is mostly caused by the greater heat of the days: for the mean of the nights increases from  $50^{\circ}0$  to  $56^{\circ}5$ , or  $6^{\circ}5$ , whereas the mean of the days increases from  $69^{\circ}6$  to  $79^{\circ}2$ , or  $9^{\circ}4$ .

As compared with the three winter months, the wind in March, April, and May blows less frequently from the S.W. and W., and more frequently from N.W., N., N.E., and E. points of the compass, arising from the general flow southwards of the air which accumulates during the winter months in Central Asia and the Arctic regions. Thus, as in Great Britain, the prevalence of the dry polar current clears away the rain and clouds, and ushers in clear weather, strong sun-heat, and a rapidly augmenting temperature.

In the month of August there are three points of interest which are suggested by the figures in Table II.,—viz., the temperature is at the maximum, the atmospheric pressure on the continent of Asia and in eastern Europe is at the minimum, and the winds in Palestine are almost wholly from the N.W. (23 out of 31 days). Suppose a storm, with the usual barometric depression, to overspread Asia, then the wind in Palestine, in reference to this storm, would be N.W., if it corresponded with the direction of the wind in every storm I have hitherto examined. Now, observations prove that at this time atmospheric pressure is low over Asia, and much lower in the interior than in Palestine and Europe. May it not then be inferred that the N.W. wind of Palestine is the result of the low barometer in Asia, as the wind flows round and in upon that region of low pressure in a spirally in-moving course? However this may be, it is certain that the continued predominance of north-westerly and northerly winds in Palestine during the summer months is a principal cause of the rainless character of those months, since they must be well drained of their moisture in passing over the mountains of Asia Minor, and be still further dried in travelling southwards into warmer regions.

The high temperature of October is a marked feature of the climate of Jerusalem. This high temperature appears to be due to the prevailing winds. As already stated, the winds in summer are chiefly N.W. and N.; but in the winter months the S.W. and W. prevail to a very considerable extent. The change (see Table II.) occurs during October and November, and takes place through the E. and S.E. points of the compass. Thus during these months the winds arrive in Palestine from Arabia, and as they bring with them the higher temperature of that region, they may be considered as prolonging the summer of Palestine into October.

Since in winter atmospheric pressure is high in Asia, the winds in Palestine are not affected by it; consequently, the N.W. wind does not preponderate, and the S.W. frequently prevails. In other words, as there is no cause during winter to divert the winds from their normal course, the equatorial current, as well as the polar current, has free scope to run its course over Palestine.

The highest mean temperature of any of the forty months was  $77^{\circ}0$  in July 1866, and the lowest  $42^{\circ}8$  in January 1864, thus giving a difference of  $34^{\circ}2$  between the temperatures of the two extreme months. The mean monthly temperature of  $42^{\circ}8$  was exceptionally low; but the high mean temperature of  $77^{\circ}0$  has been nearly reached repeatedly during the summer months.

*Extreme Temperatures.*—The highest temperature recorded was  $102^{\circ}5$ , on 27th June, 1865, and the lowest  $25^{\circ}0$ , on 20th January, 1864, the difference being  $77^{\circ}5$ .

*High Temperatures.*—On the 27th June, when the temperature in shade rose to  $102^{\circ}5$ , the lowest during the night only fell to  $76^{\circ}8$ , thus giving a mean temperature for the day of  $89^{\circ}6$ . On the same day, at 9 a.m., the dry-bulb was  $90^{\circ}1$ , and the wet  $64^{\circ}0$ ; hence, by calculation, the dew-point was  $47^{\circ}8$ , and the humidity of the air 22, saturation being 100. This high temperature, therefore, occurred along with an excessive dryness of the atmosphere, when the amount of vapour being small, the sun's rays were little obstructed in their course. The wind was N.W., and a haze was spread round the horizon. On the 19th of the same month, the temperature rose to  $101^{\circ}0$ , when the air was nearly as dry, a haze was in the horizon, and the wind N., but so light as to be regarded as a calm. Dr. Chaplin remarks that this great heat began at midnight, and the weather continued intolerably hot and oppressive all day; but a pleasant breeze from the N. sprung up in the afternoon.

A remarkable period of hot weather occurred from the 7th to the 24th October, 1865. What renders this period noteworthy is that, at the same time, *cholera prevailed very badly*. During the whole 18 days, the sky was cloudless, but overspread with thin haze; the wind was from the N.W., N., and E., but so light, except on the 15th and 16th, when it blew a light air from the E., as to be considered a calm. The highest temperature was  $94^{\circ}0$ , and on 11 days it rose to at least  $90^{\circ}0$ . During the period the mean of the maximum temperatures was  $89^{\circ}1$ , and of the minimum temperatures  $65^{\circ}8$ , thus giving a mean temperature for the 18 days of  $77^{\circ}4$ , or a little higher than the temperature of the warmest month recorded. This high temperature, and calm, close, hazy atmosphere had, no doubt, some influence in promoting the spread of cholera at the time.

Another period of warm weather occurred from the 27th May to the 2nd June, 1866. This period is also remarkable for the plague of locusts which infested the country at the time, and "ate up everything green." During the week it lasted, the temperature rose, on the 29th, to  $96^{\circ}0$ ; the mean of the highest day temperatures was  $90^{\circ}2$ , and of the lowest night temperatures  $61^{\circ}6$ , thus giving a mean temperature of  $75^{\circ}9$ , and an enormous daily range of  $28^{\circ}6$ . The air during the first six days was excessively dry; the mean of the dry-bulb being  $84^{\circ}3$ , and of the wet  $61^{\circ}4$ , it follows that the mean dew-point was  $46^{\circ}3$ , and the mean humidity 26. The wind was N.W. and light. A change took

place on the 1st June, when the wind shifted to S.W., still continuing light; three-fourths of the sky was covered with cirro-stratus clouds, and the air became close and oppressive. On the following morning, the 2nd, the barometer had fallen from 27·305 to 27·148, an unusual fall at this season; and the wind again shifted back to N.W., and blew with the strength of a gale (5 on the scale 0 to 6). At the same time the dew-point rose to 57°·0, and the humidity to 56; and during the day the temperature rose only to 74°·4; on the previous day it had risen to 91°·2.

*Low Temperatures.*—The coldest period occurred from the 16th January to the 5th February, 1864, and was the only time when the temperature fell so low as to freeze the ground, and cover pools of water and ponds with ice. On the 17th, ice appeared on the garden path; on the 18th and 19th the water in the cup of the hygrometer was frozen, and ice a quarter-inch thick was formed; on the 20th, the temperature fell to 25°·0, and on the following morning the ice was one inch thick; and on the 22nd, the ice remained all day. Ice was observed again on the 29th and 30th, and on the 3rd, 4th, and 5th February, after which the temperature rose.

On the 20th January, the temperature during the day did not rise above 37°·0, and the mean temperature of the day was only 31°·0. The dry-bulb was 32°·0, the wet 27°·2; and hence the dew-point was only 16°·1, and the humidity 45. During the three cold days of February (the 3rd, 4th, and 5th), the mean of the dry-bulb was 43°·2, of the wet 34°·3; and hence the dew-point was 23°·7, and the humidity 45. The wind was E. and N.E., the air nearly calm, and the sky clear. Thus the periods of greatest cold, as well as the times of greatest heat, were accompanied with a dry, calm atmosphere, which thus allowed free scope to the escape of heat from the earth by terrestrial radiation. During the winter of 1865, the temperature occasionally fell to 38°·0 and 39°·0 from the 13th January to the 3rd March, the lowest during the whole winter being 36°·0 on the 26th February. On that day the dew-point was 32°·6, the lowest for the season, during which no frost or ice appeared. In the winter of 1865-6, ice was found outside the city on the 14th December, 1865, when the temperature fell to 36°·8. From this date to the 2nd February, 1866, the temperature occasionally fell to from 37°·0 to 39°·0, and on New Year's Day to 35°·0, the lowest during the season. On the 20th February it fell to 37°·0; but, except on the 14th December, no frost occurred, and no ice was formed in the city during the winter. In the winter of 1866-7 the temperature fell occasionally from 37°·0 to 39°·0 from the 7th January to 26th February. The lowest temperature during the time was 35°·8 on the 8th January; on the previous morning the temperature was 37°·0; and hail fell during the night, and "perhaps" snow. Neither frost nor ice was observed this winter.

*Range of Temperature.*—The annual mean daily range of the temperature is 18°·7; the least is about 12°·5, in January and December; and the greatest about 22°·5, from May to October inclusive, that is,

during the dry season. The least in any month was  $10^{\circ}9$ , in January 1866, which was also the month when the mean humidity was greatest, being 80. The greatest range was  $24^{\circ}6$ , during October 1865. This is the month in which, as already remarked, cholera prevailed, and the meteorological elements were in a very abnormal condition. The nearest approach to this great range was  $23^{\circ}6$  in May 1866, and  $23^{\circ}5$  in August 1864. In these two months the humidity was at the monthly minimum, 39.

#### THE MOISTURE OF THE ATMOSPHERE.

To the cases of excessive drought already referred to, may be added other two. On the 2nd of April, 1864, the dry-bulb read  $81^{\circ}0$ , the wet  $56^{\circ}0$ ; hence the dew-point was  $39^{\circ}0$ , and the humidity 23. On the 29th May, 1864, at 2 p.m., the dry-bulb was  $102^{\circ}2$ , the wet  $70^{\circ}0$ ; and hence the dew-point was  $52^{\circ}0$ , and the humidity about 14. At 9 a.m. on the same day, the temperature of the air was  $86^{\circ}7$ , of the dew-point  $50^{\circ}7$ , and the humidity 29. Of the drying qualities of this desiccated atmosphere we, in this moist British climate, can form little conception.

On the other hand, during the rainy season, the air is sometimes surcharged with moisture to a degree which is not exceeded even in Ireland, or the west coast of Great Britain. Thus, on the 14th February, 1864, the dry-bulb was  $50^{\circ}0$ , the wet  $50^{\circ}0$ , and humidity therefore 100. On this occasion Dr. Chaplin remarks that "stones, furniture, and everything were damp." The range of temperature for the day was only  $3^{\circ}5$ , and a good deal of rain fell. From the 13th the barometer fell on successive days as follows:  $27\cdot522$ ,  $27\cdot422$ ,  $27\cdot302$ , and to  $27\cdot112$  on the 16th.

From the column of the elastic force of vapour, it is seen that there is most vapour dissolved in the atmosphere in July and the other summer months; but, owing to the high temperature as regards the quantity of vapour, it is not available for vegetation, except during night in the form of dew. The column of humidity shows, that during these months the fall of rain is impossible, the point of saturation being so far below that of the temperature; but during winter the humidity rises to an average of 72, and on particular days to 90, or even 100, when rain falls in copious abundance.

#### THE RAINFALL.

As regards the rainfall, the climate of Palestine is divided into a wet season and a dry season. The dry season includes the months of May, June, July, August, and September, during which no rain falls; or if any falls in the beginning or end of this period, it is only a few drops that cannot be measured with the gauge. The latter half of April, and the first half of October, may also be included in the dry season.

To the inhabitants of the country, rain is the most important element of the weather, inasmuch as the productiveness of the harvest is altogether dependent on the amount of the rain and the times of the year



when it falls. It accordingly held a prominent place among the promises made to Israel. In Deut. xi. 13, 14, they are promised that if they would love the Lord their God, and serve Him with all their heart and with all their soul, that He would give them the rain of the land in its due season, the first rain and the latter rain, that they might gather in their corn, and their wine, and their oil.

The time of the "first," "former," or "early" rain, so often referred to in Scripture, was usually some time in October, the seed-time of the year in Palestine. Its value, agriculturally, was therefore very great, since, owing to the parched state of the soil on which no rain had fallen for five months, the springing of the seed could not take place till rain fell.

The time of the "latter" rain was the latter half of March and the first half of April, or just before the maturing and ripening of the grain. In November, when all the seed is put into the soil, the mean temperature is still  $61^{\circ}0$ ; hence, with genial rains and this high temperature, which is higher than we in Scotland enjoy even in the warmest summer months, except on rare occasions, the grain springs luxuriantly. For the next three months the temperature is only as high as it is in this country from the middle of April to the middle of May,—that is, it is only sufficient for the growth of the plants, but quite inadequate for their flowering and ripening; and the same remark is applicable to the low plains of Palestine, except perhaps the plains of Jericho, which are below the level of the sea. Hence, if no rain falls after February, or if the latter rain fails, the crops are scorched up before flowering, and, producing nothing but straw and chaff, famine is the terrible consequence. But if frequent showers accompany the increasing heat in March and April, they attain their full maturity; and as they are gathered in after the dry season has commenced, the grain is stored past in the finest condition possible.

*Rainy Season of 1863-4.*—As the observations began in November 1863, we cannot go further back than the 1st of the month. In this month rain fell only on two days, 0·3 inch falling on the 10th; the rains began only on the 11th December, slight showers only having fallen previously. Rain fell copiously from the 3rd to the 5th March, and frequent showers, occasionally heavy, from the 13th to the 26th April, after which only a few drops fell. Amount of rain, 8·84 inches.

*Rainy Season of 1864-5.*—On 8th September 0·08 inch of rain fell; in October only a few drops; and the rainy season began on the 19th November, rain falling in torrents (2·28 inches) on the 25th and 26th. At the end of the first week in March, in the middle of April, and in the first week of May, seasonable showers fell. Amount of rainfall, 14·80. *Rainy Season of 1865-6.*—No rain fell, except a few drops, till 14th November, from which to the 23rd December genial but not heavy rains fell at intervals. From the latter date to the 12th January, 8·65 inches fell. Copious showers fell on the 1st and 2nd, and from the 16th to the 19th March; and refreshing showers on the 3rd and 4th, and 20th and 21st April. After this date the rain ceased. Total amount,



17·87 inches. *Rainy Season of 1866-7 to end of February.*—After a slight shower on the 4th October, the rainy season began on the 20th of that month, on which, and four following days, 1·51 inch fell. For the next eleven weeks moderate showers fell frequently; but from the 6th January to the end of February the fall of rain was excessive. Amount of rain 20·62 inches, of which 14 $\frac{3}{4}$  inches fell in the last seven weeks.

During the rainy season, from 1 to 1 $\frac{1}{2}$  inches of rain not unfrequently fall in a day; but sometimes these large amounts are greatly exceeded. The largest fall on any day during the period over which the observations extend was 3·175 inches, on the 26th January, 1867. Also on the four days from the 7th to the 10th of the same month, 5·25 inches fell. It was probably in such great rains as these that the people of Israel sat trembling in the street of the house of God when Ezra stood up and rebuked them for their trespasses (Ezra x. 9). If it be remembered that this took place about the beginning of December, when the weather often resembles a cold blustering day of March, the scene, with the pathetic appeal of the people to be allowed to return to their houses, will be better appreciated.

After heavy rains, Bier Eyub, the well of En Rogel of Scripture, flows over in a copious stream to the Kedron. This happened on the following occasions: 9th January, 1864; 8th January, 1866; 9th and 26th January and 26th February, 1867,—five times in all.

All the instances of the rainfall have been carefully compared with the direction of the wind at the time. The result shows, with scarcely an exception, that rain falls uniformly with W. and S.W. winds. When the rain has cleared away, the wind has at the same time shifted to the N.W., N., or N.E., and the air becomes drier, which, by increasing evaporation, chills still further these chilling winds of the winter months; and hence the appropriateness of the proverb: “The north wind driveth away rain; so doth an angry countenance a backbiting tongue” (Prov. xxv. 23).

*Hail* fell on four occasions, viz.—15th April and 16th December, 1865, and 7th January and 9th February, 1867.

*Thunderstorms* occurred on 3rd February, 14th and 15th April, 3rd and 8th May, 1st and 3rd November, and 24th December, 1865; 11th April and 10th November, 1866; and 9th February, 1867,—in all eleven thunderstorms. On the last occasion 1·30 inch of rain (and melted hail) fell, the wind blew with the violence of a hurricane, and the barometer fell from 27·564 to 27·327, about the largest fall in twenty-four hours that occurred during the period of observation.

The *Sirocco* occurred twice. On the 20th March, 1864, it advanced from the south, and prevailed all night till the morning of the 21st; maximum temperature, 78°·2; minimum, 58°·6; mean, 68°·4; dew-point, 40°·6; and humidity, 32. A sirocco from the south-east, characterised by Dr. Chaplin as very bad, occurred on the 1st October, 1864, when the temperature rose to 94°·1; the dew-point at 9 a.m. being 49°·8, and the humidity 27. It was succeeded by a slight shower.

ABSTRACT OF METEOROLOGICAL OBSERVATIONS made at JERUSALEM, in Syria, from 1st March, 1865, to 28th February, 1867; and MONTHLY AVERAGES and EXTREMES on a Mean of three years and four months, ending 28th February, 1867. Observations made by Dr. THOMAS CHAPLIN. Lat. 31° 46' 45" N.; long. 35° 13' 0" E. Height above the sea, 2,500 feet.

TABLE I.—Monthly Means and EXTREMES from March 1865, to February 1867.

Months.	BAROMETER.			SELF-REGISTERING THERMOMETERS. IN AIR, AND PROTECTED.						HYGROMETERS.			REDUCTIONS. Glaisher's Tables, 2nd Edition.		WINDS.								RAIN.					
	Mean at Station corrected, and at 32°.	Mean reduced to 32°, and Sea level.	Monthly Range.	Highest in Month.	Lowest in Month.	Monthly Range.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean Temperature.	Dry Bulb.	Wet Bulb.	Dew-point.	Elastic Force of Vapour. Sat.=100.	Humidity, Sat.=100.	Number of Days it blew in certain Directions.								Number of Days in fell.	Amount.			
																N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			Variable. or Variable.	Mean Pressure on square foot.	
1865	In.	In.	In.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	In.			N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Variable. or Variable.	lbs.	Days	In.
March	27·393	30·101	0·228	88·0	39·0	49·0	68·9	50·1	18·8	59·5	61·6	52·6	45·1	·297	55	1	3	2	4	4	1	3	1	18	0	0·55	5	0·40
April	27·412	30·121	0·262	83·0	42·0	41·0	69·1	48·7	20·4	58·9	62·3	52·3	43·8	·284	50	1	2	4	4	1	3	1	13	0	0·64	2	0·72	
May	27·358	30·041	0·344	89·8	43·5	46·3	76·3	55·0	21·3	63·6	69·4	56·0	45·7	·306	43	3	4	2	0	1	7	6	8	0	0·45	3	0·35	
June	27·466	30·075	0·201	102·5	50·5	40·0	86·3	63·7	22·6	75·0	79·3	63·1	52·0	·388	39	3	3	2	2	1	3	0	10	0	0·72	0	0·00	
July	27·289	29·914	0·150	92·0	57·5	34·5	85·2	63·6	21·6	74·4	79·0	70·0	63·8	·502	59	1	2	0	1	1	4	7	15	0	0·37	0	0·00	
August	27·277	29·900	0·187	92·4	61·0	31·4	87·6	65·7	21·9	76·6	79·4	64·8	54·8	·430	42	1	1	0	0	1	2	8	18	0	0·40	0	0·00	
Sept.	27·388	30·049	0·227	91·0	54·0	37·0	80·4	59·3	21·1	69·8	70·8	62·4	56·4	·449	40	1	0	0	1	0	0	8	12	0	0·25	0	0·00	
October	27·486	30·126	0·248	94·0	54·9	39·1	84·6	69·0	24·6	72·3	75·6	62·6	53·7	·408	46	10	2	3	0	0	0	2	14	0	0·02	0	0·00	
Nov.	27·435	30·138	0·208	89·0	46·2	42·8	80·0	52·7	15·3	60·4	60·8	54·9	49·8	·367	67	1	7	6	1	0	0	2	4	9	0	0·34	11	1·48
Dec.	27·444	30·217	0·306	66·1	36·8	29·3	56·0	42·2	13·8	49·1	49·1	44·1	38·7	·236	57	3	10	3	0	0	5	3	7	0	0	0·14	11	5·15
1866																												
Jan.	27·435	30·234	0·548	58·2	35·0	23·2	51·2	40·3	10·9	45·8	45·8	43·0	39·8	·246	80	2	6	3	1	4	9	2	4	0	0	0·49	14	4·78
Feb.	27·437	30·212	0·454	65·0	37·0	28·0	56·2	43·1	13·1	49·6	51·1	47·0	42·7	·276	74	0	5	4	2	2	6	7	0	0	0	0·81	9	3·02
March	27·400	30·126	0·344	78·6	36·0	42·6	64·4	48·1	16·3	56·2	58·2	51·1	44·7	·296	61	2	5	3	0	2	3	4	14	0	0	1·49	9	3·17
April	27·357	30·060	0·288	81·9	43·0	38·9	70·2	51·0	19·2	60·6	64·2	54·0	45·6	·305	50	5	2	3	3	2	8	3	4	0	0	0·59	4	0·27
May	27·374	30·026	0·100	96·0	49·0	47·0	81·5	57·9	23·6	69·7	75·2	69·4	48·2	·382	39	3	5	2	1	4	1	3	13	0	0	1·32	3	0·00
June	27·317	29·969	0·275	91·2	54·2	37·0	80·4	59·6	20·8	70·7	73·8	62·0	53·4	·410	40	2	0	2	0	0	8	3	15	0	0	0·66	0	0·00
July	27·267	29·860	0·176	95·3	59·8	35·5	83·4	65·6	22·8	77·0	81·3	65·9	55·3	·440	40	1	0	0	1	0	1	5	23	0	0	0·53	0	0·00
August	27·281	29·860	0·102	95·2	61·3	33·0	87·2	64·9	22·3	77·0	79·4	65·5	56·0	·449	44	1	0	0	0	0	1	2	25	0	0	0·63	0	0·00
Sept.	27·351	29·982	0·176	100·0	59·8	40·2	85·8	62·7	23·1	73·2	76·7	65·0	56·8	·462	50	7	0	0	1	0	1	2	1	20	0	0·14	0	0·00
October	27·437	30·100	0·100	92·8	46·8	46·0	77·4	58·7	18·7	68·0	70·5	60·1	50·3	·366	43	1	3	10	2	1	8	1	5	0	0	0·34	5	1·57
Nov.	27·427	30·158	0·326	84·0	39·0	45·0	64·2	49·1	15·1	56·6	57·4	50·5	44·2	·290	61	0	5	10	1	0	0	2	6	0	0	0·61	8	1·66
Dec.	27·468	30·230	0·285	71·2	40·5	36·7	57·5	44·9	12·6	51·2	51·4	44·5	37·4	·224	59	0	4	4	3	1	11	2	6	0	0	0·37	13	2·51
1867																												
Jan.	27·406	30·244	0·420	65·1	35·8	29·3	55·5	41·8	13·7	48·6	50·1	45·3	40·2	·253	69	1	9	6	1	1	9	1	3	0	0	0·53	11	9·02
Feb.	27·507	30·296	0·330	69·5	36·5	24·0	52·7	40·7	12·0	46·7	47·9	44·0	39·7	·244	74	1	4	0	1	2	2	8	4	0	0	1·56	12	5·86

TABLE II.—Monthly Means and Extremes on a mean of Three Years and Four Months, ending February 1867.

Months.	BAROMETER.			SELF-REGISTERING THERMOMETERS. IN AIR, AND PROTECTED.										HYGROMETER.		DEDUCTIONS, Glaisher's Tables, 2nd Edition.		WINDS.								RAIN.	
	Mean at Station corrected, and at 32°.	Mean reduced, to 32°, and Sea level.	Monthly Range.	Highest in Month.	Lowest in Month.	Monthly Range.	Mean of all the Highest.	Mean of all the Lowest.	Mean Daily Range.	Mean Temperature.	Dry Bulb.	Wet Bulb.	Dew-point.	Elastic Force of Vapour.	Humidity, Sat.=100.	Number of Days it blew in certain Directions								Mean Pressure on square foot.	Number of Days it fell.	Amount.	
	In.	In.	In.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	In.		N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm or Variable.	lbs.	Days	In.
Jan.	27.451	30.211	0.420	71.1	25.0	46.1	53.4	40.9	12.5	47.2	47.2	43.2	33.7	.235	73	1	6	6	1	2	8	4	3	0	0.59	10	5.18
Feb.	27.426	30.177	0.482	69.5	30.9	38.6	55.4	42.3	13.1	48.8	49.6	45.3	40.7	.255	72	1	3	5	1	2	4	6	0	0.89	8	3.57	
March	27.401	30.095	0.289	83.0	36.0	52.0	67.5	49.4	18.1	58.4	60.5	52.1	44.8	.293	56	2	4	7	2	2	3	4	7	0	0.88	6	1.53
April	27.359	30.045	0.321	85.6	42.0	43.6	69.6	50.0	19.6	59.8	62.6	52.8	44.5	.292	51	2	4	3	4	2	6	4	7	0	0.67	4	0.86
May	27.398	30.036	0.258	100.0	43.5	50.5	73.2	56.5	22.7	67.8	70.7	57.7	47.8	.333	45	3	3	3	4	1	3	6	8	0	0.76	1	0.12
June	27.370	29.970	0.257	102.5	54.2	43.3	83.0	63.0	20.0	73.0	75.9	62.8	53.5	.411	47	3	1	2	2	0	2	8	10	0	1.40	1	0.00
July	27.278	29.870	0.149	95.3	57.1	38.2	86.0	63.6	22.4	74.8	73.9	67.5	59.7	.512	52	2	1	0	1	0	2	4	13	0	0.70	0	0.00
August	27.286	29.874	0.184	101.0	56.8	44.2	87.5	65.0	22.5	76.2	79.4	64.6	54.5	.425	42	1	0	1	0	1	1	4	23	0	0.59	0	0.00
Sept.	27.374	29.987	0.210	100.0	54.0	46.0	83.6	60.9	22.7	72.2	73.9	63.7	56.2	.456	54	8	1	0	1	0	1	6	13	0	0.58	0	0.00
Oct.	27.459	30.065	0.193	94.9	46.8	43.1	83.1	60.6	22.5	71.8	73.8	60.7	51.1	.376	46	5	3	7	3	0	3	1	9	0	0.35	8	0.52
Nov.	27.443	30.126	0.276	89.0	39.0	50.0	63.9	53.1	15.8	61.0	61.1	53.6	47.1	.324	60	1	6	10	2	0	3	4	4	0	0.52	6	1.50
Dec.	27.443	30.176	0.351	71.2	35.1	36.1	56.2	43.5	12.7	49.9	50.9	46.4	41.7	.265	72	1	4	5	2	1	8	4	6	0	0.58	11	3.00
	27.391	30.052	0.283	102.5	25.0	77.5	72.8	54.1	13.7	63.4	65.4	55.9	48.1	.336	53	30	33	49	23	11	46	59	114	0	0.70	50	16.23

# ANALYSIS OF GLASS FOUND IN CAPTAIN WARREN'S SHAFTS AT JERUSALEM.

THE LABORATORY, 7, Quality Court, Chancery Lane.

*London, October 28th, 1871.*

SIR,—I beg leave to report to you the results of my analysis of the portion of Jewish glass you furnished me with on the 7th of October instant.

The portion furnished consisted of a large number of small pieces, many of which had undergone a change both in structure and colour by time and exposure.

The portion analysed consisted of those pieces which appeared to me to have undergone the least, if any, change.

In 100 parts.

Silica .....	69.80
Alumina .....	3.10
Oxide of Iron ( $\text{Fe}_2\text{O}_3$ ) .....	2.00
Oxide of Antimony .....	0.29
Oxide of Lead .....	a trace
Lime .....	8.50
Magnesia .....	0.55
Potash .....	1.49
Soda .....	13.79
Phosphoric Acid .....	0.80
Loss in analysis .....	0.08
	<u>100.00</u>

And, specific gravity 2.430

I am, Sir, your obedient servant,

DUGALD CAMPBELL.

## LETTER FROM THE SECRETARY OF THE AMERICAN ASSOCIATION.

UNIVERSITY, NEW YORK, Nov. 15, 1871.

DEAR SIR,—I have the honour to inform you that the Rev. Dr. J. P. Thompson having, by reason of ill-health, resigned the chairmanship of the American Palestine Exploration Committee, the Rev. R. D. Hitchcock, D.D., has been elected to fill his place. The fearful devastation of the fire at Chicago has so drawn upon the sympathy and benevolence of all, that our special work is retarded. We shall, however, make the effort to start our expedition this coming winter. I have the honour to remain,

Yours with respect,

HOWARD CROSBY, *Secretary.*

## LETTER FROM MR. SAMUEL SHARPE.

SIR,—I beg to call your attention to an error in page 148 "Warren's Letters," *Quarterly Statement* No. V., which arises from relying on the authorised version of the Bible.

Jeremiah xix. 2 should be translated, "The valley of the son of Hinnom, which is by the entrance of the *Pottery Gate*."

This gate, where the potsherds were thrown, has been thought to be the same as the Dung gate of Nehemiah iii. 14. That is doubtful, but at any rate Jeremiah does not place it in the east near the Kedron.

Yours obediently,

32, *Highbury Place*, July 31, 1871.

SAMUEL SHARPE.

## CAPTAIN STEWART'S LETTERS.

### I.

HOTEL JERUSALEM, JAFFA, 11th Nov., 1871.

I suppose you will wish to hear of our safety so far as we have got on our journey. We reached Alexandria on Friday the 3rd, just in time to be too late for the Austrian Lloyd steamer to Jaffa, so had to rest in Alexandria till the following Monday. The captain of the P. and O. steamer *Ceylon* was good enough to allow all the baggage to remain on board his ship, and the N.C. officers stayed there also. Monday we shifted baggage to the Messageries boat *Nile*, and started same afternoon. The following day touched at Port Said, and remained some hours, leaving again in the afternoon of Tuesday, and sighted Jaffa early next morning, when I at once landed and paid a visit to M. Kayat, brother to the consul, the latter being in England. He kindly gave a permit to land baggage free of customs duty, and together we looked for storage room; the "strus," as the natives call them in the bazaars, turned out such miserable hovels that I declined to have anything to say to them, and proceeded to the German colony which has sprung up here in the outskirts of the town. The landlord and owner of this hotel most kindly offered all assistance, and undertook to store our baggage at a very moderate rate, not one-fourth of what the enterprising Arabs demanded, so I at once closed with him, and had all our baggage conveyed hither, my reasons for selecting Jaffa for storage-place at present, being that it is much nearer Ramleh, where we break ground, and clearly we must be near our base of operations till we are more conversant with the resources of the country, and have ascertained what requisites we should have with us. Besides, it saves the cost of transport to Jerusalem, a considerable item, as we have with us some thirty cases.

Since our arrival we have all been at work from sun-rise to sun-down unpacking cases and repacking for the field, examining instruments, &c., &c. Some of the instruments, I am sorry to say, have been shaken, but I think none beyond our powers to put right. I had intended going to Jerusalem at once to see our consul, but found the men could do nothing without me at first, being quite unaccustomed to such work as is before us; indeed, to all of us it has a novel character. We have, I think, broken the neck of the work, and I hope to start for Jerusalem on Monday.

R. W. STEWART.



## THE PALESTINE EXPLORATION FUND.

---

### THE SURVEY OF PALESTINE.

THE following letters and reports tell their own tale. Captain Stewart, as we have already announced in the papers, was obliged, after starting the work, to return home invalided. He is still in England, and it is uncertain whether he will be able to return. Meantime, owing to the ability and zeal of Mr. C. F. Tyrwhitt Drake, aided by the two non-commissioned officers, Sergeant Black and Corporal Armstrong, the Survey is proceeding vigorously.

---

### CAPTAIN STEWART'S LETTERS.

#### II.

JAFFA, *December 15th*, 1871.

MY DEAR SIR,—My last letter to you was written immediately after our arrival in Palestine, and merely reported our safety so far. On Monday the 13th November, I started for Jerusalem to present the letters of introduction with which I had been supplied from England, and also to ascertain whether the firman had arrived from Constantinople. I joined company with three other Englishmen bound for Jerusalem. We slept Monday night at Ramleh, at the Latin Convent, and were hospitably entertained by the monks. The following morning, started before daybreak, and after a long ride reached Jerusalem about 4 p.m. The country appeared very much dried up after the long summer, and the autumn rains had not yet fallen. The next few days were spent presenting my letters of introduction, which invariably procured for me a friendly greeting. However, my permit to carry on the Survey had not arrived, and hoping that it might in a few days, also being desirous of obtaining a general knowledge of the climate and general features of the country, I made a tour to the Dead Sea and Jordan, returning to Jerusalem on the 19th, and finding that the firman had not yet arrived,

I made application to the Pacha, through our consul, for a temporary permit, but the Governor of Jerusalem did not feel himself at liberty to give me the authorisation, prior to the arrival of the firman. At our consul's request, he telegraphed to Damascus to the Governor-General for his authority to do so, but no reply has been received up to date. Such being the state of affairs, I determined to proceed to work at once, and having purchased tents, and engaged a servant to act as interpreter and caterer, returned to Jaffa on Tuesday the 21st, and on Thursday the 23rd started for Ramleh, near to which place our base line was to be measured. Friday and Saturday were devoted to making the necessary reconnaissance before breaking ground, and I was well pleased to find that good positions for observing from could be found on the top of the Tower of the Forty Martyrs at Ramleh and the top of the Greek Convent at Lydda. Our future plan of operation was decided upon, and all seemed prosperous, when, I regret to say, on Saturday evening, the 25th, I was suddenly seized with an attack of congestion of the liver, which at once placed me on the "sick list." Sunday, I left my tent for the Russian Convent, where I remained till Wednesday the 29th, when finding I made no material progress towards recovery, I sent to Jaffa for a palanquin and came to this station, where I have been kindly attended to by a German doctor belonging to the colony which has sprung up here of late years, and I trust I am now quite recovered, although far from strong. In the meantime the survey has progressed satisfactorily under Sergeant Black.

A "base line" of over four miles has been carefully measured—the several measurements agreeing wonderfully well together—and a survey of the country in the vicinity of Ramleh has been made, and suitable points for the triangulation selected. More could not be done without the co-operation of Mr. Drake or myself. The former has telegraphed to me from Damascus that he is on the point of starting, but I regret to say it is now blowing such a gale of wind that no steamer could lie in the roadstead, and if she could, no boat dare face the surf which is breaking on the beach.

This station of Jaffa is believed to owe its existence to a reef of rocks which lies a few hundred yards from the shore, and affords some shelter to such small craft as can lie inside. There is no other natural harbour along this coast from Alexandria to Haiffa at the foot of Mount Carmel. Dr. Thompson says, in his interesting work entitled "The Land and the Book," "it was in fact the only harbour of any notoriety possessed by the Jews throughout the greater part of their national existence." We read in 2 Chron. ii. 10 that it was then the port of Jerusalem, whither Hiram, king of Tyre, sent timber for the building of the temple at Jerusalem: "And we will cut wood out of Lebanon, as much as thou shalt need: and we will bring it to thee in floats by sea to Joppa, and thou shalt carry it up to Jerusalem."

We read of Joppa or Jaffa again as being the port from which Jonah desired to flee from the presence of the Lord unto Tarshish, when

ordered to go to Nineveh, and cry against it; and finally we learn from the Acts of the Apostles that Joppa was the habitation of a certain disciple named Tabitha, which by interpretation is called Dorcas; and hither the Apostle Peter came from Lydda, and restored her to life afterwards. He tarried many days in Joppa with one Simon a tanner. It is a curious fact, and exemplifies the changelessness of Eastern life, that the trade of tanning is extensively carried on at Jaffa to this day.

In modern times Jaffa has obtained an unhappy notoriety in connection with Bonaparte and the massacre of unarmed prisoners. The modern town is believed not to be more than 100 years old; it is picturesquely situated on a headland, the houses rising in terraces from the water's edge; it is entirely surrounded by a wall and ditch, to which the term fortifications is given, but, such as they are, they are falling rapidly to decay. Surrounding Jaffa are the orange gardens for which it is justly extolled, and which are a considerable source of wealth to the owners. The annual value of fruits grown in Jaffa is said to be £10,000. I have been greatly struck at times when riding along this coast to see vines and fig-trees growing apparently in barren sand which abounds here; either there is a supply of water beneath the surface sufficient to nourish the roots, or, what I think is more probable, the sand is not more than a foot or two in depth, and the roots have been laid in good soil beneath. About half a mile from Jaffa is situated the German colony which has sprung into existence in the last few years: this colony, like most others, has a history not uneventful, which I hope to send you at a future date.

---

MEDITERRANEAN HOTEL, JERUSALEM, *December 29th.*

So far I wrote from Jaffa, on one of the few days I was able to do anything, and now I continue my narrative.

On Sunday the 17th Mr. Drake arrived from Damascus, and as I then felt strong enough to ride to Jerusalem, we both started Monday the 18th, sleeping at Ramleh the same night. Following morning again in the saddle, the day bitter cold, with a keen wind, raw and threatening rain; reached Jerusalem same afternoon, and Dr. Chaplin called on me in the evening, and seemed to think I had not much amiss. Next day he made a careful inspection of my state, and I was again thrown back on the sick list, and have not been out of my room since. To-day I am greatly better, and hope another week will see me out and about. I write this long account of myself to account for the absence of letters. I have been quite unable to write before this. Drake left Jerusalem on Wednesday last for Ramleh, and the triangulation of the country is in progress. My sickness has undoubtedly been a certain cause of delay in the progress, but even had I been quite well, no great progress could have been made owing to the very wet and rough weather we have had almost incessantly. I am glad to say the firman has arrived, and the

Governor has prepared a suitable local order in conformity therewith, enjoining all sheikhs and others in authority to give us all assistance in carrying out the work and to protect our station posts.

R. W. STEWART.

---

JERUSALEM, 23rd Jan.

Excuse my writing to you in pencil, but I am forbidden to sit up for any length of time. I enclose herewith the meteorological reports up to 31st Dec. They have been most carefully registered and tabulated in strict accordance with Mr. Glaisher's form; indeed I had them copied on to foreign postage paper from his form for convenience of transmission. I wish I had known more of the country when I first was taken ill, as I should certainly have gone to Beyrout instead of stopping at Jaffa, and had good English medical attendance. I wish you would inform the Committee that I am most happy to report that Sergeant Black appears competent to carry out any portion of the Survey unaided, and has shown a most praiseworthy zeal, discretion, and ability in many respects since my illness, so that I am able to leave the work to him with *perfect confidence*. The corporal also is a most happy selection. I congratulate myself on having two such men, conscientious and upright, as far as I can judge, in all respects.

R. W. STEWART.

Jan. 4th

P.S. Dr. Chaplin has ordered me to England, as he finds there is no prospect of recovery here. I go *via* Southampton, handing over everything to Drake.

---

## MR. TYRWHITT DRAKE'S REPORTS.

### I.

CAMP, BEYROUT NUBA, Feb. 1, 1872.

AT the request of Captain Stewart, R.E., now at Beyrout, I beg to forward a report of the Survey from the time I joined it up to the present date.

On December 14 I hurriedly left Damascus, having received a telegram from Captain Stewart stating that he was ill at Jaffa. I reached that place on the 17th, and the next day accompanied him to Jerusalem, where he placed himself in the hands of Dr. Chaplin. On the 30th I joined Sergeant Black and Corporal Armstrong at Ramleh, and on the following Monday (January 1, 1872) we began to extend the work.

Owing to no lack of energy on the part of the non-commissioned officers, of whose zeal and accuracy I cannot speak too highly, but simply to the fact of their being ignorant of Arabic, and the want of

some person to attend to the nomenclature and facilitate dealings with the natives, they had been able up to this point to do little more than measure the base line and sketch in the country in the immediate neighbourhood of Ramleh and Lidd.

The accuracy of this work is most satisfactory, as is the case with all that has been done up to date, and augurs well for future success.

The following is the report of Sergeant Black :—

“RAMLEH, 31st January, 1872.

“Up to the 31st December a base line had been measured in the plain south-east of Lydda and Ramleh, but as the trigonometrical observations could not up to that time be commenced a survey was made of the country surrounding Ramleh to the extent of twenty square miles, which was ready to be transferred to its proper place on the plan as soon as a sufficient number of points should be fixed to enable this to be done. During January poles and cairns were erected, and the triangulation extended over about 100 square miles of country, and the detail was filled in on sixty square miles, in addition to the twenty already mentioned, making in all eighty square miles.

“The triangulation included Jaffa, and the astronomical observations taken at Ramleh agreed excellently with those of the Admiralty survey taken at Jaffa, when the two places were connected by means of the trigonometrical distances and a meridian found at one of the principal stations. The points were then ‘scored’ on the plans, and the district of country which had been surveyed was transferred to the plan and drawn.

“The chaining of the base line was checked by angles taken at an intermediate point on it, and from a portion of the base a similar result was produced as from its whole length, when the length of a line was calculated from each. The triangulation was carried away from the base lines in such a manner that very large and well-shaped triangles were very shortly obtained. A diagram showing the general plan of the triangulation up to this time is attached, but a great many prominent points, which are not shown on it, were fixed within the area by observations, and made use of in filling in the detail.

“A connection was made with a bench mark at Jimsu, on the line of levels from the Mediterranean to the Dead Sea, thus giving a means of finding the altitudes of the several trigonometrical stations from the vertical angles.

“THOS. BLACK, Sergeant, R.E.”

From January 1—20 the time was employed in setting up cairns and poles at trigonometrical stations, observing from them, and sketching in the intervening and neighbouring country. In that interval sixty square miles have been filled in, and since laid down on the large sheets. The whole amount thus completed, including the twenty square miles up to December 31, makes a total of eighty square miles.



The work of getting the names correctly is somewhat difficult. In the desert a wady will generally have but one name from its head to its termination or junction with a more important one. In these well-populated districts a wady changes its name half-a-dozen times in as many miles, taking a new one in the territory of each village that it passes through. The fear of the fellahin that we have secret designs of re-conquering the country is a fruitful source of difficulty. This got over, remains the crass stupidity which cannot give a direct answer to a simple question, the exact object of which it does not understand; for why should a Frank wish to know the name of an insignificant wady or hill in their land? The following dialogue will show that denseness is not peculiar to the traditional Chawbacon. I ride up to a man ploughing in a wady, and say, "What do you call this wady?"

"Which wady? Where?"

"Why, the one we are in; here."

"What do you want to know for?"

"To write it on the map," &c.

"Oh, this is called El Wad" (the valley).

"Nothing else?"

"No."

"Well, the men here must be illiterate donkeys!" (turning to the man) "Why, when you go home and say that you have been ploughing in the 'Wad,' perhaps they'll think that you've been on the other side of that hill yonder."

(In a tone of pique) "Oh, no! I should say I've been in W. Serár."

"Then you call this Wady Serár?"

"Yes, that's what we call it."

A little sarcasm is a weapon that seldom, if ever, fails to penetrate the Syrian perceptions, for the native, with all his ignorance and stupidity, is essentially vain, and by this means many a point may be gained or bit of information acquired which no amount of bullying, no length of entreaties, would serve to accomplish.

I have now personally verified every name put down in the map as far as we have gone. The names in Van de Velde are frequently misspelt and sometimes radically wrong, for instance Kefr 'Ana is written K. 'Auna; Nyáneh is put as Náámeh; Saidon for Sáydún, &c., &c.

I will now lay before you notes on certain sites which I believe not to have been hitherto fully identified. I hope to bring several others to your notice shortly, but am desirous of gaining further proofs before submitting them to criticism.

*Hadid.*—This town is mentioned\* in conjunction with Lod (Lidd) and

\* Neh. vii. 37: "The children of Lod, Hadid, and Ono, seven hundred twenty, and one." Neh. xi. 34, 35: "Hadid, Zeboim, Neballat, Lod, and Ono, the valley of craftsmen." Ezra ii. 33: "The children of Lod, Hadid, and Ono, seven hundred twenty and five."

Ono (Kefr 'Ana), and in chapter xi. 34, 35, with Lod and Neballat (Bayt Nebala), and in Ezra ii. 33 it is coupled, as in the first quoted passage, with Lod and Ono. Hence we must look for it in the neighbourhood of these places.

In 1 Macc. xii. 38 Adida is a town situated on the Shephelah, or low hills between the mountains and the plain; Eusebius states it to be to the east of Diospolis (Lydda), and this answers well to the position of the modern Hadítheh. This place, with Bayt Nebala, Kefr 'Ana, and Lidd, form a quadrilateral of which the sides measure  $1\frac{1}{2}$ , 6,  $5\frac{1}{4}$ , and  $3\frac{1}{2}$  miles respectively. No village of importance at present exists within this space. The village of Hadítheh is small, and only occupies a portion of a large circular Tell, the top of which has been artificially levelled, and evidently has been the site of an old and important town. The grey earth, broken pottery, and fragments of squared stones, are enough to prove this, but it is unmistakable when we see the number of quarries, rock-hewn tombs, and stone chambers in the vicinity.

The Tell occupies a most commanding position on a spur of the Shephelah running between Wady Serár and the plain.\*

*Jehud.*—A town of Dan, mentioned in Josh. xix. 45 in conjunction with the following. The Arabic name of the present village, *El Yehudíyeh*, seems undoubtedly to be the old name, but just so much changed as, which is very frequently the case, to bear a meaning in Arabic. It is now a large and flourishing village of 800 to 1000 inhabitants.

The Makam of Nebi Húdah (the patriarch Judah) is here held in great reverence. A Makam is a dedicatory mosque or chapel, usually containing a cenotaph, and erected by some pious person in consequence of a dream or in fulfilment of a vow; it is used as a mosque. I may here observe that at a village called Nebi Danián (Van de Velde calls it simply Daniyal) is the Makam of Nebi Dan—the prophet or patriarch Dan. This I found out by asking the shaykh, who was Nebi Danián? “It is not Nebi Danián,” he replied, “but Nebi Dan, the son of Sidna Yákúb, and the Makam of his brother Húdah is yonder” (pointing to El Yehudíyeh), “and his brothers Shimown and Yamín (Simeon and Benjamin) are near Kalkílieh, and it is only by a vulgar corruption that the village is called N. Danián.” It is curious to find the Hebrew form, “Shimown,” preserved and used instead of the Arabic, Sim‘án.

*Bene Berak.*—Eusebius locates this place at *βαρηκᾶ*, near Azotus, but this is improbable, as in Josh. xix. 45, 46 we find “Jehud and Bene-Berak and Gathrimmon and Rakkon with the border before Japho;” this puts it near Yafa, and not near Ashdod. The village of Ibn Ibrak answers to it in every way; even the alliteration has been kept in the Arabic. The fact, too, that Bene-Berak is mentioned between Jehud

\* Josh. xix. 45, 46: “And Jehud, and Bene-berak, and Gath-rimmon, and Me-jarkon, and Rakkon, with the border before Japho.”

and Japho, strengthens the supposition, for that is its geographical position.

*Gezer*.—A border town of Ephraim, from which the Canaanites were not driven out:\* it was afterwards given to the Levites.† Destroyed by Pharaoh, it was rebuilt by his son-in-law Solomon.‡ Battles with the Philistines are recorded as having taken place at it, and according to the marginal reading,§ it is made the same as Gob.

I feel inclined to identify *Tell Jezar* with this Gezer. Eusebius mentions a village of Gazara, distant four miles from Nicopolis (Emmaus, now Amwas), and northwards from it, *ἐν Βοπετοῖς*. Now Tell Jezar lies W.N.W. of Amwas, and is a little more than four miles distant. This answers to the somewhat loose description, "*ἐν Βοπετοῖς*."

The tomb of a shaykh named Mohamamad-el-jezari, or more commonly "El jezari," simply, makes a conspicuous landmark on the summit of a long, high Tell, at the southern end of which lies the village of Abu Shushah.

This Tell is somewhat in the shape of a figure 8, being narrowest in the middle. The eastern side is scarped and faced with large roughly-hewn stones in steps, many of which are still *in situ*; to the west it is terraced with three steep banks. The whole of the hill is strewn with broken stones and countless fragments of pottery, some of good red clay, smooth and bright coloured, much resembling Samian ware: amongst these are scattered a few morsels of glass. I observed, too, a few rock-hewn tombs and several oil-presses in the immediate neighbourhood, and a large rock-hewn cistern lined with a rubble wall coated with cement, on the top of the ridge. There is a very large quarry-cave on an adjacent hill; it is called Magharet Hejjyah. The natives have a tradition that the city of the Lord Noah stood on Tell Jezar at the time of the deluge. There can be no doubt that a large and important town formerly stood here. At the base of the ridge, between it and Kubab, is a well, or rather spring, named 'Ain Yardi, which also has traces of ruins near it.

In various places I have observed rock-hewn tombs. At Dayr Tarif I found them of a pattern which I have never seen except in North Syria (in Jebel el Zowi, between Hamah and Aleppo), viz., an oblong opening, originally covered with a slab, sunk in the flat surface of a

\* Josh. xvi. 3, 10: "And goeth down westward to the coast of Japhleti, unto the coast of Beth-horon the nether, and to Gezer: and the goings out thereof are at the sea. . . . And they drave not out the Canaanites that dwelt in Gezer."

† Josh. xxi. 21: "For they gave them Shechem. . . . and Gezer with her suburbs."

‡ 1 Kings xix. 16, 17: "Pharaoh king of Egypt had gone up and taken Gezer and burned it with fire . . . and Solomon built Gezer."

§ 1 Chron. xx. 4: "It came to pass after this that there arose war at Gezer with the Philistines."

rock, with an arched-over *loculus* on either side, for the reception of the body: the whole depth varies from three to six feet, those at Dayr Tarif being about three and a half feet. Excavated cisterns, sometimes of great size, and usually shaped like beehives or inverted funnels, are of frequent occurrence. The subterraneous storechambers are used to the present day by the natives, and are called, as in Morocco, *metamir* (pl. of *matamora*), but in Syria, *jubb*. The cisterns and graves at Dayr Tarif are called *nawamis* (pl. of *namús*, lit. a mosquito), which is the name given by the Bedawin in Sinai to the primæval cairns, tombs, and dwellings found there.

In many places on the plain there are tanks above ground, solidly built and lined with Roman cement; these have usually a fine circular well beside them, either cut through the rock or lined with well-hewn stones, according to the nature of the ground. Some of these tanks, which are generally about thirty feet square and six or seven deep, are broken up seemingly by the subsidence of the soil beneath them. In more than one instance I have found a whole side fallen *en masse* and lying unbroken on the ground, so hard is the cement. Some of these tanks are used to the present day. The wells being deep, a horse or mule is attached to the end of a rope, which works over a roller, and walking away from the well draws up the leathern bucket attached to the other end. Sufficient water is thus drawn in an hour or two to quench the thirst of the flocks and herds to whom the right of drinking at the well belongs. The shepherds, as they come up, bale out the water by degrees into the small trough from which the cattle drink, and thus much trouble and waste is avoided.

Enclosed\* are traces of the ground plan, sketches of the exterior, of the doorway—which is very remarkable—and of the cornices, &c., which I made a short time ago of a building at Mezayra'a, some ten miles north-east of Ramleh. It is built of large, somewhat roughly squared blocks of limestone, the interstices being filled up with small pieces of stone and very hard cement. The staircase, which formerly led to the roof, is now broken away, and with some difficulty I made my way up the wall, lizard fashion. I found the roof, which inside consists of huge slabs supported on arches, in style similar to the Hauran, 'Alah, and Jebel el Zowi architecture, to be covered outside with a thick layer of cement, absolutely as perfect as the day it was laid down. So hard was it that I found it no easy task to break off a fragment. The cement throughout is of the same durability, but that on the roof is mixed with pounded brick. The only ornamentation beyond the cornices is to be found in the acanthus capitals to the pillars in front of the portico; these are much defaced. No inscription was to be found.

The peculiarly well preserved state of the building renders it interesting, but it will prove much more so if my first idea, fortified by the

\* These are at the Office of the Fund, 9, Pall Mall East. See also Photo. No. 110.



opinion of Dr. Ginsburg—who, however, only saw my plan and sketches, and from these alone was of course unwilling to give a decided judgment at a moment's notice—prove true, namely, that it is a synagogue.

I hope, as soon as Captain Stewart be well enough to rejoin us, to have some spare time to devote to the natural history and geology, but at present my time is so fully occupied that I can do but little towards making collections.

I have observed one point in the geology worth noting, viz., an outbreak of basalt—very friable from exposure—between the villages of Abu Shushah and Sýdún. I am not aware that any basalt has ever been observed to the west of the main range so far southward.

The statistics of population are very difficult to obtain in this country; there is no census, and the people have a dislike to their numbers being known. If a community be small it fears oppression; if rich, extortion. Again, if the numbers of men can be approximated, it is only by guess work that the women and children can be reckoned. It depends much upon the wealth of a place whether a man is able to marry more than one wife; consequently, in a rich village the ratio of women to men will be larger than in a poor place.

The approximate population of Ramleh is

Moslems.....	800 men,	?	houses =	about 2000	souls.
Latin Catholics.....	15	„	6	„	= „ 40 „
Armenians.....	?	„	2	„	= „ 12 „
Greek Orthodox ....	200	„	50	„	= „ 500 „
(or 300 with boys)					
Monks in the Arme-					
nian, Latin, and					
Greek convents ....	varies		= „	30	„
Jews .....	2			2	„
					2284 total.

The Moslems have four mosques, more or less used, as well as the old Christian church, which is their principal place of worship. This building has been thoroughly described by M. le Comte de Vogüé. It is oddly oriented, the run of the walls being (true bearing)  $111^{\circ} 20'$ , or  $21^{\circ} 20'$  south of east. The Christians have each their places of worship in their respective convents.

C. F. TYRWHITT DRAKE.

NOTE.—Van de Velde (see map of Palestine and Memoirs) also identifies Hadd with Haditheh, Bene-berek with Ibn Ibrak, and Jehud with El Yehudiyeh. The Gezer of Josh. xii. 12 he identifies (Memoir, p. 314) with Yásûr.



## II.

P. E. F. CAMP, BAYT NUBA, *Feb.*, 1872.

THE progress of the Survey in February is less than that of the preceding month. Still, however, rather more than fifty square miles have been sketched in, while the trigonometrical stations cover a much greater area. The diminution of actual work done is due to two unavoidable causes. Firstly, the rain, which has been unusually heavy, having fallen on no less than seventeen days in the month; we have nevertheless set up trigonometrical stations at various points westward of a line drawn from a mile north-east of Bayt 'Ur el Foka southwards to Saris, and satisfactory observations have been taken from them. Secondly, the fact that we have now reached the edge of the real mountain district which forms the backbone of the country. The difficulty of traversing these ranges will be understood when I say that a distance of about three and a half miles in a direct line occupied us more than three and a half hours riding. This is owing to the extreme abruptness of the wadies, which sometimes reach a depth of 1,000 feet at no great distance below the watershed. Rough travelling of this kind is not at all beneficial to a delicate instrument like a theodolite; but as it can be by no means avoided, we try to make the best of it.

The *Shephelah*, or hill country lying between the mountains and the plain, presents none of these difficulties, as the valleys are seldom more than 300 feet in depth, and the slopes are much more gradual.

This word "*Shephelah*" has been wrongly rendered "plain" and "valley" in the A. V. (*e.g.*, Zech. vii. 7 and Josh. xv. 33). Eusebius says that the country about Eleutheropolis was still called *Shephelah* in his time. It is in fact the district of rolling hills situated as above mentioned, and forms a most marked feature in the physical geography of the country. It is not, however, so far as I am aware, shown on any map otherwise than as a series of spurs or shoulders running down from the main range, which in reality it is not.

It is very important that these natural features should be well understood and carefully borne in mind as most important in helping to clear up the obscurity in which the geography of the Old Testament is now enveloped. These distinctions of mountain, hill, and plain are more than once mentioned in the Talmud (*cf.* tract *Shevith*, &c.) Rabbi Jochanan says that from Beth-horon to Emmaus is mountain (הר); from Emmaus to Lydda, hill (שְׁמֵלִיחַ) and from Lydda to the sea, plain (עֲמָק), which is perfectly correct, as Amwas is situated at the base of a spur from the mountains, and the hills extend to within a very short distance of Lidd, beyond which is the plain.

This will assist us in determining the border of Ephraim near

which we are now camped. In Josh. xvi. 5-10\* we are told that it came to Beth-horon the Upper, and then went out towards the sea to Michmethah (which in ch. xvii. 7 we learn to have been in the neighbourhood of Shechem). Thus we see that it did not extend to the sea. This is further confirmed by the statement of Josephus, *Antiq.* v. 1, where he says that the territory of Ephraim "extended to the great plain." From Josh. xvi. 8 it might seem that their land reached to the sea-coast, but from the following verse and xvii. 9 it would rather seem that there were only some separate cities assigned to Ephraim in the land of Manasseh, which lay on the coast. This might explain the expression (xvii. 10), "And they met together in Asher on the north, and Issachar on the east," which would be the case if the border line of Ephraim did not run to the coast, for then the boundaries of the four tribes might meet in one place. The expressions in Joshua are so obscure that the exact boundary must be more or less a conjecture; but this solution seems to me quite possible without straining any point. Our survey will doubtless throw light on the situation of the "brook Kanah," for judging by what I already know, nothing can be more incorrect than the watersheds and valleys as laid down on the best existing maps of Palestine. They seem, indeed, to have been put in at the map engraver's own sweet will, so as not to interfere with the names of the villages, which, as might be expected, are generally more approximately correct.

In Josh. xix. 42, 43, two towns are mentioned, Ajalon and Elon. In the Hebrew they are both spelt אֵילֹן, and differ only in the pointing. In this passage the former is mentioned in conjunction with Shaalabin (שַׁעֲלָבִין, Sept. *Σαλαβιν*), and in 1 Kings iv. 9. Elon-beth-Hannan (אֵילֹן בֵּית חֲנָן) is also mentioned as being in the same district. The two names are again in conjunction in Judges i. 35. From these passages we may perhaps conclude that there were two towns called אֵילֹן, as there were two Beth-horons. In this case Yalo † would answer to one, and Bayt 'Anan to the Beth-hanan. Yalo is situated on

\* "And the border of the children of Ephraim according to their families was thus: even the border of their inheritance on the east side was Ataroth-addar, unto Beth-horon the upper; and the border went out toward the sea to Michmethah on the north side; and the border went about eastward unto Taanath-shiloh, and passed by it on the east to Janohah: and it went down from Janohah to Ataroth, and to Naarath, and came to Jericho, and went out at Jordan. The border went out from Tappuah westward unto the river Kanah; and the goings out thereof were at the sea. This is the inheritance of the tribe of the children of Ephraim by their families. And the separate cities for the children of Ephraim were among the inheritance of the children of Manasseh, all the cities with their villages. And they drove not out the Canaanites that dwell in Gezer: but the Canaanites dwell among the Ephraimites unto this day, and serve under tribute."

† See Smith's *Dict. of the Bible*, "Aijalon."

the north side of the same spur on whose western slopes Amwas lies, while Bayt 'Anan is in the mountain six miles distant.

Whether this theory be accepted or not, it is generally admitted that the village of Yalo represents Ajalon. Hieronymus says that the Jews place it at the second milestone from Nicopolis (Amwas) on the road to Ælia (Jerusalem), which answers to Yalo. Eusebius, however, describes it as a village three miles east of Bethel; this, of course, cannot be the Ajalon of Joshua.

Now Shaalabin, as I have already shown, is mentioned in conjunction with Ajalon, and must therefore be looked for in the same neighbourhood. Hieronymus seems to have identified it, for in his commentary on Ezek. xlviii., when mentioning the division of Dan, he has these words, " . . . . . ubi sunt turres Ailon et Selebi et Emmaus," which I am inclined to translate "Yalo, Selbit, and Amwas." The ruins of Selbit occupy a commanding position on the north of Wady Selman (Wady Soleiman of the maps), and cover a considerable space of ground. They are distant two and a half miles from Yalo.

In the Septuagint (Josh. xv. 60) the verse said to be interpolated contains the names of Κουλον and Καρεμ, which have been identified with Kolonia and 'Ain Karem. Θωβης seems to me to answer to Soba. The reading Soris or Sores, which is found in some MSS., may have arisen from confusing it with Σαρις (Josephus, Antiq. vi. 14), which seems to be the same as Saris, a village a short distance north-east of Kesla (which has been identified with Chesalon), a town on the north border of Judah. If this be the case, the boundary line probably went along the wady, which, according to the maps, runs down to 'Ain el Shems (Beth-shemesh). I shall determine this as soon as possible.

Near Bayt 'Anam, on a hill-top, are some heaps of ruins called Jebí'a, "the little Jeba." In Josh. xviii. 24, 25 and xxi. 17, Gibeon (גִּבְעֹן) and Geba (גִּבְעָה) are mentioned as two towns of Benjamin. In 1 Chron. xiv. 16\* we find the Philistines smitten by David from Gibeon to Gezer, but in the parallel passage of 2 Sam. v. 25† we find it is from Geba to Gezer. In 1 Sam. xiii. 2, 3 we read that Jonathan had 1,000 men with him in Gibeah of Benjamin, and smote the Philistines in Geba. Josephus too (Antiq. vi. 7 and vii. 10) seems to refer to two places, which he calls Γαβᾶα, and Eusebius places Geba on the road from Jerusalem to Nicopolis (Amwas) at the seventh milestone. The direct road to Jerusalem from Amwas would be past Jebí'a, and there is still a considerable traffic along it, though the carriage road to the south has rendered it somewhat less frequented.

From these quotations we may conclude that there was a Geba of

\* "David therefore did as God commanded him: and they smote the host of the Philistines from Gibeon even to Gazer."

† "And David did so, as the Lord had commanded him; and smote the Philistines from Geba until thou come to Gazer."

the Gibeonites in the territory of Benjamin other than the Gibeah now El Jib. Jebí'a, too, is at no great distance from Kefíreh—which has been identified with Chephirah—another city of the Gibeonites. Hence it seems not unreasonable to conclude that Jebí'a is the Arabic form of Geb'a.

In Benjamin there were several cities of a nearly similar name; for instance נכט (Josh. xxi. 17), נכעח (Judg. xix. 13), נכעת (Josh. xviii. 28), נבעין (Josh. xxi. 17), as well as the town נבתון of Dan (Josh. xix. 44).

It may be urged that Bayt 'Anan, lying half a mile to the east of Jebí'a, would preclude it from belonging to Dan, as Elon-beth-Hannan, but we must remember that the boundary of Ephraim was at Upper Beth-horon, and consequently Dan extended up to that point. If this be so, it is possible that Wády Ibrayj, or, as it is called higher up, Wády Miska, was the boundary between Dan and Benjamin.

I have discovered what seems to be undoubtedly a cromlech in the vicinity of sepulchral (?) cairns. This cromlech, the first that I have ever seen in Palestine, consists of a somewhat triangular stone 6ft. 6in. high above ground, 9ft. broad at the base, and from 2ft. to 3ft. in thickness. Its front faces north-north-east, and 12ft. behind it is a smaller stone of somewhat the same form. The cairns lie to the north and east, and to the north is a stone about 3½ft. high seemingly, as is often the case in early stone monuments of phallic import. Two other cairns or barrows that I have found run also north-north-east. Of these I shall write further in a future report.

Since I last wrote I have had a dispute with the fellahin of this place, and have been obliged to teach them a lesson which has had a most salutary effect. The affair might have turned out seriously had I not taken very prompt measures, but as it is I am glad that it occurred. We now stand on a much better footing than formerly, and the natives are beginning to understand that, though we are perfectly willing to treat them well so long as they treat us in the same way, yet directly they annoy us, that they will get the worst of it. The men of this village began quarrelling with the servants the very day that we camped here, but the moment I came to the spot they professed themselves only too ready to do all that I wanted. A few days later, however, they abused and even struck one of our muleteers for serving Christians, which they said was a disgrace to Moslems; the next day they tried to beat Habib, a Lebanon Christian, who has been in my service for some time. On hearing this I sent off a letter to Jerusalem, and on the following day some soldiers arrived. Meanwhile the villagers had come to beg my pardon, but the only comfort they received from me was the assurance that, judged by their own religion, they had proved themselves kafirs (infidels) for having called other men so without reason.

On the arrival of the soldiers I demanded that the shaykh and elders should write and seal a paper expressing contrition for what they had done, and pledging themselves that it should not be repeated. This they refused to do, so the soldiers, acting under orders from Jerusalem,







*From the Ordnance Survey of Jerusalem.*

Scale  $\frac{1}{2500}$

*Aqueduct recently discovered* \_\_\_\_\_

took four of them off as prisoners, but hardly had they started on their road when the rest of the villagers repented and called them back to receive the required guarantee.

Since then they have been on their best behaviour, and we are now on very good terms, especially as I have cured two or three of them of ophthalmia. This has raised my reputation as a hakím to an unpleasant pitch, and I am constantly besieged by applicants, even from the neighbouring villages, for medicines to cure all kinds of diseases—from blindness to palsy. Now, however, as on former travels, I find that the distribution of a little medicine facilitates dealings with the people, though I fear that it seldom produces anything like real gratitude.

Two of our cairns have been knocked down, but I immediately sent soldiers to make the men in whose land they were built reconstruct them, and I hope that before long these ignorant savages will understand that we have no intention of injuring them, and will not offer us these obstructions, which arise simply from their ignorance and superstition. Kindness from a person whom they know to have the power of compelling them, will be appreciated: kindness from one whose strength they either are ignorant of or doubt is looked upon as cowardice, and as such taken advantage of.

Whenever we have had occasion to visit the villages and set up poles, &c., on the houses, there has been no difficulty whatever, and in my intercourse with the people I have had no trouble—other than that arising from their douseness of comprehension—in obtaining what information I required.

I am glad to say that the cold and wet, though much interfering with our work, has not at all affected the health of any of the party.

CHARLES F. TYRWHITT DRAKE, F.R.G.S.

## RECENT DISCOVERIES AT JERUSALEM.

BY CAPTAIN WILSON.

MR. SCHICK, in a letter dated Jerusalem, December 15th, 1871, gives the following interesting details of an aqueduct recently discovered on the hill commonly known as Bezetha. The position of the aqueduct is shown on the accompanying lithograph, and on reference to this it will be seen that it runs from a point near the Damascus Gate to the souterrain at the Convent of the Sisters of Zion, and so connects with the rock-hewn passage explored by Captain Warren, R.E. (see his Letters, No. XIV., and "Recovery of Jerusalem," p. 198). According to Mr. Schick, the aqueduct is from two and a half to three feet wide, and so high that a man can walk through it easily, the height rising, occasionally, to twelve feet and more; it is partly hewn out of the rock, and partly of masonry, the channel being covered by a vault in which numerous openings, now closed by rubbish, were noticed. The aqueduct

crossed the deep pit east of the Damascus Gate, immediately without the city wall, and part of it is visible in the scarped face of the rock on its northern side, near the entrance to the great cavern, or "cotton grotto;" it is therefore older than this pit. In building the present city wall, which stands on old foundations, the upper portion of the aqueduct was destroyed.

Mr. Schick's discovery is of great importance, and it is much to be regretted that he was not able to follow it up, and trace the source from which the aqueduct derived its supply of water; the Palestine Fund has, however, taken the matter in hand, and we may hope during the course of the year to obtain full information. Meanwhile the following suggestions are offered as to the age of the aqueduct and the object for which it was built.

The deep pit east of the Damascus Gate, mentioned above, is hewn out of the solid rock, and now forms part of the ditch which protects the north wall of the city; it is connected with the great caverns or quarries from which it is generally supposed a large proportion of the stone used by Herod in rebuilding the Temple was taken, and is in all probability the original entrance to them. When we remember the terraced limestone formation of Jerusalem, and the gentle even slope at which the strata dip towards the Temple area, a glance at the map shows at once that great facilities existed for running down immense blocks of stone from the mouth of the quarries near the Damascus Gate to their position in the Temple wall. It has indeed been suggested that the mouth of the quarries was at their southern end, near the Austrian Consulate, and if this be the case, the present northern entrance may possibly be of later date than the reign of Herod, but no such opening has yet been discovered. At present, therefore, I think we may assume that the pit east of the Damascus Gate was made during the reign of Herod, and that the aqueduct, which was partly destroyed by the excavation, was of still older date, possibly the work of Hezekiah, who did so much for the improvement of the water supply of Jerusalem.

Following the course of the aqueduct southwards, we find that it runs into the souterrain at the Convent of the Sisters of Zion, and as there is a peculiarity in the formation of this souterrain which does not appear to have been previously noticed, it will be necessary to say a few words with respect to it.

In one of Captain Warren's letters (No. XVI. See also "Recovery of Jerusalem," p. 224) he points out the probable existence of a ditch in the Haram area, a little north of the platform on which the Dome of the Rock stands. The sides of this ditch, which are indicated on the Ordnance Survey plan of the Haram (marked *c d* on lithograph), are not, as might have been expected, parallel to the northern and southern walls of the enclosure, but perpendicular to a line representing the general direction of the ridge; the reason apparently being that the quantity of rock to be excavated in forming a ditch would be less on

this line than on any other. Turning again to the souterrain, we find that the cuttings in the rock at the north and south ends (F and E on plan) are also perpendicular to the general direction of the hill and parallel to the sides of the ditch in the Haram area. (See woodcut.) This leads me to believe that the souterrain was originally a ditch, possibly that separating the Tower of Antonia from Bezetha, and that in making it the aqueduct was cut through a second time. At a later period it may have been converted into the existing twin pools of the souterrain for the purpose of collecting the rainfall on Bezetha, which would be partly conveyed to it by that portion of the aqueduct left untouched.

South of the souterrain, as we learn from a letter of Dr. Chaplin's (*Quarterly Statement*, No. VII.), the aqueduct runs a few yards beyond the point reached by Captain Warren, and then, turning sharply to the east, terminates abruptly on a massive stone wall similar in character to that at the Wailing Place, and in the same line with it. This seems to show that the aqueduct was again destroyed when the wall was built, apparently from the character of the masonry during the reign of Herod. Whether the aqueduct ran down the crest of the hill, or kept along its side, must at present be a matter of conjecture; there seems every reason to believe that the remaining portion is still in existence, and its discovery by some future explorer will throw considerable light on the topography of the city. The discovery of a wall, similar to that at the Wailing Place, at this point is also of interest, but unfortunately the information relating to it, and its position with reference to the rock, is not as full as we could wish. A plan and section of the souterrain, and the southern portion of the aqueduct as far as the Haram wall, which has been prepared by Mr. Schick, is attached.

We may now endeavour to trace the aqueduct to its source. In my notes to the Ordnance Survey of Jerusalem, written in 1865, the following passage relating to the supply of water to the city, from the north, occurs:—"The pool to the left of the north road, a little beyond the Tombs of the Kings, is now nearly filled with soil washed down by the winter rains; but at the upper end there is still a shallow excavation which holds water after heavy rain, and at the lower end the scarped rock is visible; this must have been the largest pool in the neighbourhood of the city, and is admirably situated for collecting the surface drainage of the upper branches of the Kedron valley. It was probably connected with the Pool of Bethesda by an aqueduct or subterranean conduit, as this latter pool is so large that it must have been filled by some such means. The difficulty is to find this conduit. The most natural line for it would be to follow the course of the Kedron valley and enter near St. Stephen's Gate, filling at the same time the Birket Sitti Maryam; but against this is the constant tradition of water having been brought in near the centre of the north wall of the city, the reputed springs at the Convent of the Sisters of Zion and Church of the Flagellation, and the Arab name of a street in that quarter,



Hosh Bakir or Hosh Bezbezi (the running or bubbling of water), such as would be caused by the bursting forth of a spring; none such exists, but the name is suggestive. If there is any truth in these traditions, the water must have been brought down by a tunnel similar to that at Siloam, and cut in the soft stratum of 'malaki,' which would here lie at about the right slope and distance from the surface. Perhaps this may have been the ancient conduit lost or destroyed at some troubled period, and afterwards replaced by a later one following the course of the Kedron valley. In this case the cutting in the rock at the Convent of the Sisters of Zion would be a portion of the former, and the conduit at the Birket Sitti Maryam a portion of the latter. The traditional pool near the Church of St. Anne would of course be connected with such a system of water supply."

I am still inclined to believe that the aqueduct derived its supply of water from the pool north of the Tombs of the Kings, or from some point near it,\* and would identify this pool with the "upper pool" of 2 Kings xviii. 17, and of Isaiah vii. 3 and xxxvi. 2, and also with the upper water-course (accurately, source of the waters) of Gihon stopped by Hezekiah when he brought its waters "*straight down to the west side of the city of David.*" The aqueduct would in this case be the conduit of the upper pool in the highway of the fuller's field, by which Rabshakeh stood when he addressed the Jews on the walls of the city.

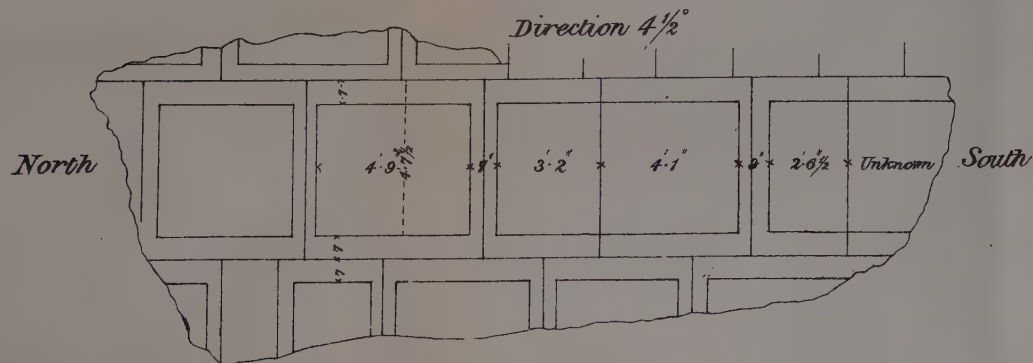
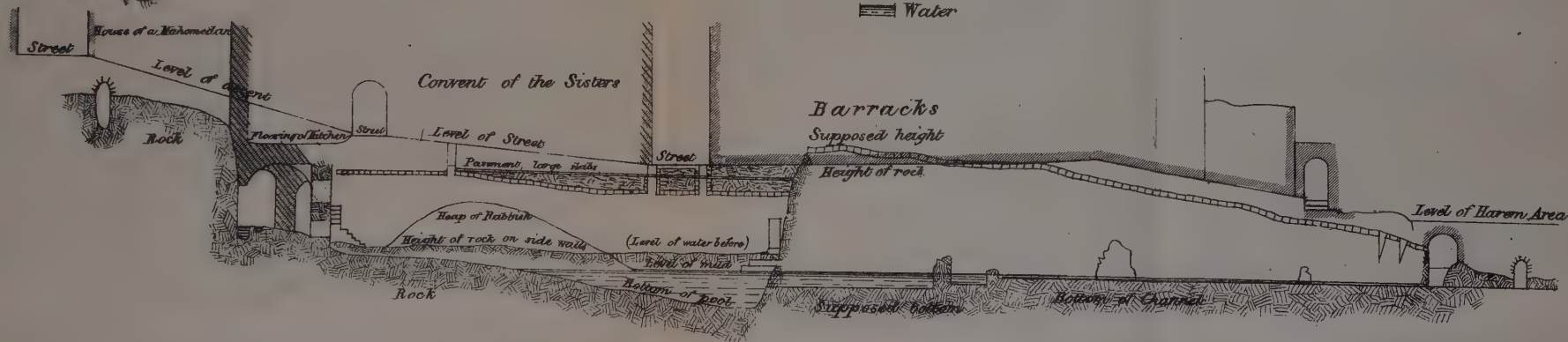
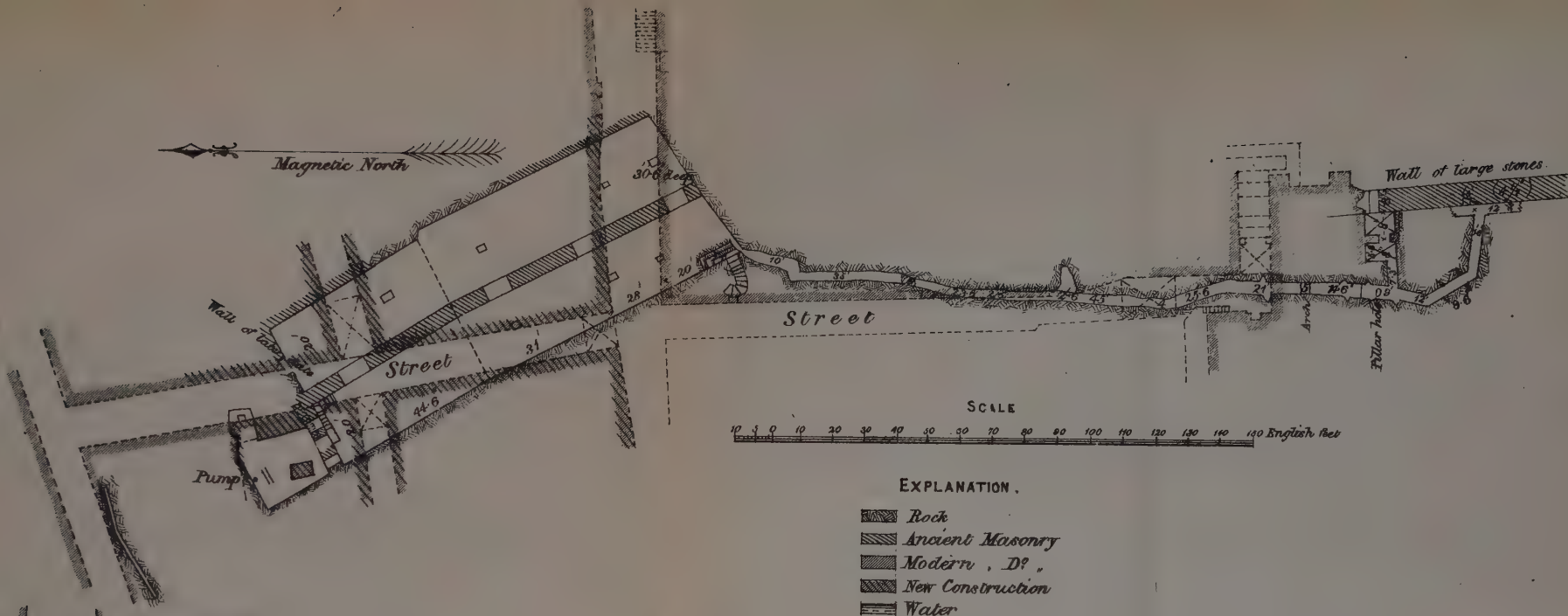
The frequent identification of Siloam with Lower Gihon, the scene of Solomon's anointment as king, is noticed in the "Dictionary of the Bible," art. Gihon, and the position of the source, mentioned above, from which the aqueduct probably derived its supply, accords well with the slight indications we have of the site of Upper Gihon. Assuming also that the view taken by several writers, that the city of David was on the eastern hill, is correct, the aqueduct is exactly in the position we might expect to find it from the verse quoted above. The verse has always been a difficult one to understand in connection with the topography of Jerusalem, but assuming that the city of David was on the eastern hill, it is at once explained by the recent discovery.†

I do not know of any other source from which the aqueduct could have derived its supply of water, except perhaps the sealed fountain near Solomon's Pools. The high-level aqueduct from this spring has never been traced into the city; the last place at which it is seen is on the so-called Plain of Rephaim, and its level is sufficiently high to deliver water at the Jaffa Gate. The level of the new aqueduct is lower than this,

\* In the Wady Biyâr, near Solomon's Pools, there is a long tunnel cut in the rock for the purpose of collecting water, and there are others of a similar nature in the country; they are apparently of great age, and the aqueduct recently discovered may have derived its water supply in a similar manner.

† In the article on the Topography of Jerusalem in the "Dictionary of the Bible," this northerly position is given to Gihon, and on one of the maps the great central valley which separates the eastern from the western hill is called the Valley of Gihon.







apparently about twenty feet, and it is difficult to believe that the water would have been brought into the city at a level so much lower than necessary, especially as it might, after supplying the upper town, have been taken straight down to the Temple over the causeway. It may possibly be a branch of the high-level aqueduct, brought round the head of the great central valley to supply Bezetha with water; but this hardly seems likely, as it would then be necessary to make the date of the excavation east of the Damascus Gate and the cutting at the *southern* later than the reign of Herod.

Mr. Schick states, in addition, that he has made a careful plan of the great quarries, or "Cotton Grotto," and of some adjacent ones which have recently been discovered. The latter extend beyond the city to the north, and the present wall, which bends inwards at this point, runs over them. Mr. Schick is of opinion that the original wall ran in a straight line from A to B (see plan), and that the present wall is modern. It may be noticed that if there was an opening to the quarries on this side, near I, for instance, stones could be easily run down the eastern side of the hill for the construction of the east wall.

Mr. Schick also mentions that he has traced out the numerous aqueducts in Wádies Aroob and Biyár, and laid down their positions on a map. He believes that the aqueduct which conveyed water from Wády Aroob to Jerusalem, and which proves to be nearly sixty miles long, was made by Herod, and that the high-level aqueduct from the sealed fountain is the work of Solomon.

Mr. Schick is at present engaged in constructing a model which will show the natural features of the ground before they were covered with rubbish; and as, during his long residence in Jerusalem, he has had peculiar facilities for obtaining information, the model promises to be extremely interesting.

C. W. W.

## PALESTINE GEOGRAPHY IN THE SEVENTEENTH CENTURY.\*

BY JOHN EGLINGTON BAILEY.

No one at all familiar with the work whose title is at the head of this paper would hesitate to give it a prominent place among the literature of the Holy Land, which it has been projected to collect in connection with the Exploration Fund. Lamb, who knew the work well, would assuredly make it one of the "front teeth" of the collection; but not so much on account of its practical utility—such books, according to Elia's canon, were no books—as on account of its quaintness and *wit*. For, though professedly a mere geographical description of Palestine, the

\* "A Pisgah Sight of Palestine and the Confines thereof; with the History of the Old and New Testament acted thereon. By Thomas Fuller, B.D. London: Printed by M. F. for John Williams, &c. 1650."

writer, "quaint old Fuller," better known from his connection with his "Church History" and "Worthies," has scattered throughout such a profuse display of his peculiar imagery and facetiousness as to render every page of it most delightful to read. In addition to the sacred topography, he enters at length into many of the Bible narratives, and introduces very many other matters which have not the remotest connection with his title-page. Hence the book is calculated to both amuse and instruct; and the saying, "a great book, a great evil," was never more false than in its application to this work. In lack of other matter for the *Quarterly Statement*, a few words about it may not be out of place; the more so as we may derive from it a clear view of the knowledge of the Holy Land which our ancestors possessed about the middle of the seventeenth century.

Fuller's attention was first attracted to this subject by his History of the Crusades, which he published in 1638 under the title of "The Holie War." Palestine being mainly the theatre of that history, he described it in a few brief but characteristic chapters, giving indeed to chapter xviii. the very title of the work we are noticing. He had by that time looked closely into the accessible geographical knowledge of the time, for we find him making the following curious remark on the map prefixed to the "Holie War:"—

"Of thirty maps and descriptions of the Holy Land, I have never met with two in all considerables alike: some sink valleys where others raise mountains; yea, and others where others begin them; and sometimes with a wanton dash of the pen create a stream in land and a creek in sea more than nature ever owned. In these differences we have followed the Scripture as an impartial umpire. The latitudes and longitudes (wherein there be also unreliable discords) I have omitted, being advised that it will not quit cost in a map of so small extent."

Fuller was too much engaged in preaching for the royal cause and in campaigning with the royalist armies to resume what was apparently a dearly cherished work, viz., the amplification of the chapters to which I have referred. So soon, however, as the wandering parson obtained, with the curacy at Waltham Abbey, a fixed habitation, he composed the "Pisgah Sight," laying aside for a time those other literary labours on which his fame rests.

It is a large folio of some 800 pages, and was issued at great expense, which was defrayed in a large measure by Fuller's elaborate system of obtaining "patrons." He perpetuates the names and arms of at least *seventy* of these friends! The *engraving* in the work was a serious item in the expense. Besides a very large map of the country, there are twenty-seven double-paged maps of the tribes, the surrounding nations, the land of Moriah, Jerusalem, &c., sketches of the Temple, the clothes of the Jews, their idols, &c. All the maps bear in parts some resemblance to the old charts of Africa and other *terre incognite* which used to circulate among our early navigators. The artists have aimed at depicting the chief *events* of the Bible narratives on the particular spots

where they occurred, and they have gained their point with much ingenuity. Thus, the progress of the Israelites is pictorially traced into the promised land; refugees are shown to be hastening towards the cities of refuge, followed by pursuing avengers; Jonah's "whale," with the ship in the storm, is represented with exaggerated bigness off Joppa; and Moses is seen viewing the land from Pisgah. Fuller terms these quaint drawings "history-properties," and gravely recommends them to one of his child-patrons until such time as he could read! With the same apparent gravity he also requests the reader not to measure his "properties" by the *scale of miles* in his maps, but to carry one in his eye for that purpose!

The *first* book contains a general description of Judea; the *second* is occupied with the tribes; the *third* treats of Jerusalem and the Temple; while the *fourth* comprises the surrounding nations. To this section are added illustrated accounts of the Tabernacle, garments, idols, measures, &c., of the Jews. The *fifth* book is devoted to a miscellaneous assortment of topics.

Fuller's work occupied a foremost place in his day among those works whose aim was to illustrate the Bible. His position in relation to the undertaking he likens (chap. i.) to that of the Israelites at Kadesh Barnea, whose desire to go up to possess the land was "deaded" by the spies' report of the three sons of Anak: when pleasing considerations urged him to compile the book, "three giant-like objections" disheartened him. First, *that the description of the country had been done by many before*; an objection, he says, which might be lawful against the industry of all posterity, but which never disheartened *St. Luke*, forasmuch as many had taken in hand to set forth histories before him; and he adds:—

"Yea, the former endeavours of many in the same matter argue the merit of the work to be great. For sure there is some extraordinary worth in that face which hath so many suitors."

Second: *that the work could not perfectly be done by any*—an objection, he says, which should quicken and not quench industry. Third: *that if exactly done, it would be altogether useless, and might be somewhat superstitious.*

Under the latter head he quietly jeers the heated imaginations of certain of his contemporaries when, in answer to the remark that it was better to let the land sleep quietly, he says: "the rather because the New Jerusalem (Rev. xxi. 10) is now daily expected to come down, and these corporal (nor to say *carnal*) studies of this terrestrial Canaan begin to grow out of fashion with the more knowing sort of Christians." He claimed for his studies that they did much to the true understanding of the Bible. In the verse, "And hath made of one blood all the nations of men" (Acts xvii. 26), he finds three studies in which the industrious antiquary took especial delight:—

"We may see Divinity the Queen waited on by three of her principal ladies of honour, namely, skill in (1) GENEALOGIES, concerning the persons of men and



their pedigrees—‘*of one blood all nations;*’ (2) CHRONOLOGY, in the exact computation ‘*of the times afore appointed;*’ (3) GEOGRAPHY, measuring out the limits of several nations—‘*and the bounds of their habitation.*’”

A few passages which we now come to cite will show the spirit and pleasantry of the work :—

JERUSALEM.—“As Jerusalem was the navel of Judea, so the Fathers make Judea the middest of the world, whereunto they bring (not to say *bow*) those places of Scripture, ‘Thou hast wrought salvation in the midst of the earth.’ Indeed, seeing the whole world is a *round table*, and the Gospel the *food* for men’s souls, it was fitting that this *great dish* should be set in the midst of the *board*, that all the guests round about might equally reach unto it; and Jerusalem was the *center* whence the *lines of salvation* went out into all lands.”—(iii. 315.)

“THE LONG-LASTING OF THE PYRAMIDS is not the least of admiration belonging unto them. They were born the first, and do live the last of all the seven wonders in the world. Strange, that in three thousand years and upwards, no avaritious prince was found to destroy them, to make profit of their marble and rich materials; no humourous or spiteful prince offered to overthrow them merely to get a greater name for his peevishness in confounding than their pride in first founding them; no zealot-reformer (whilst Egypt was Christian) demolished them under the notion of pagan monuments. But, surviving such casualties, strange, that after so long continuance they have not fallen like copy-holds, into the hand of the Seigneur (as lord of the manor) for want of repairing. Yea, at the present they are rather ancient than ruinous; and, though weather-beaten in their tops, have lively looks under a gray head, likely to abide these many years in the same condition as being too great for any throat to swallow whole, and too hard for any teeth to bite asunder.”—(iv. 85.)

THE MASSACRE OF THE INNOCENTS.—“The souls of these children are charitably conceived by the primitive church all marched to heaven as the *Infantry* of the noble Army of Martyrs.”—(ii. 301.)

“THE ONCE FAMOUS CITY OF CAPERNAUM, Christ’s own city. Note by the way, Christ had three cities which may be called his own (if seven contended for Homer, well may three be allowed to Christ): Bethlehem, where he was born; Nazareth, where conceived and bred; and Capernaum, where he dwelt—more than probably in the house of Simon Peter. This Capernaum was the magazine of Christ’s miracles. Here was healed the servant of that good centurion, who, though a Gentile, out-faithed Israel itself. . . . Here Simon Peter’s wife’s mother was cured of a fever; and here such as brought the man sick of the palsy, not finding a door on the floor, made one on the roof (Love will creep, but Faith will climb where it cannot go), let him down with cords, his bed bringing him in, which presently he carried out being perfectly cured. Here also Christ restored the daughter of Jairus to life, and in the way as he went (each parenthesis of our Saviour’s motion is full of heavenly matter, and his *obiter* more to the purpose than our *iter*) he cured the woman of her flux of blood with the touch of his garment. But amongst all these and more wonders, the greatest was the ingratitude of the people of Capernaum, justly occasioning our Saviour’s sad prediction, ‘And thou, Capernaum, which are exalted,’ &c. O sad strapado of the soul, to be hoisted up so high, and then cast down suddenly so low, enough to disjoint all the powers thereof in pieces! Capernaum at this day is a poor village, scarce consisting of seven fishermen’s cottages.”—(ii. 109.)

"As for their conceit that Anti-Christ should be born in *Chorazin*, I take it to be a mere monkish device to divert men's eyes from seeking him in the right place where he is to be found."—(ii. 97.)

The difficulties as to the position of many towns, &c., are settled by Fuller in his rough and ready way. The first syllable of Gadara is to him argument enough to place it in Gad. He finds the distance in miles between two places stated differently in two authors, and he "umpires" such difficulties by *striking the balance*. Dibon, which he finds sometimes resigned to Reuben (Josh. xiii. 27), sometimes to Gad (Numb. xxxii. 24), he treats similarly. "Some," he says, "make them different and distant cities, which, in my apprehension, is rather to set up two marks than to hit the right one. For seeing these two tribes confine together [are contiguous], and both lay claim to Dibon (like the two mothers challenging the living child), we have only, instead of a sword, made use of pricks, setting it *equally in the bounds of both*." The distance between Cyprus and the continent "*could not be great, if it be true what Pliny reports, that whole herds of deer used to swim over thither*." The work concludes with a very elaborate index of names, with English equivalents, similar in some respects to that given in Stanley's "Palestine;" in it, "to fix the Hebrew names better in our memory, we have here and there (as the propriety of our language and commodities of our country will admit) inserted some English towns as *synonymas*, and parallel to the Hebrew in signification."

Designed to make the readers of his day more familiar with the geography of the Holy Land, Fuller's *Pisgah* must often have been ranged with the Bible in the English homes of that time. Without competent skill in sacred geography, he says that ignorant persons, like the blind Syrians, who, intending to go to Dothan, went to Samaria, "must needs make many absurd and dangerous mistakes." "Nor can knowledge herein," he adds, "be more speedily and truly attained than by a particular description of the tribes, where the eye will learn more in an hour from a map than the ear can learn in a day from discourse." He complained that while his countrymen were generally quick-sighted in other kingdoms and countries, they "were altogether blind as touching Judea and the land of Palestine—the home of their meditations who are conversant in all the historical passages of Scripture." Spite of its great age the book even yet remains eminently useful in this particular, albeit that so much fresh light has been thrown on sacred topography by more recent travellers and scholars. The writer of this article has often consulted it with more advantage than he has derived from better-known works. We may see a proof of the popularity and usefulness of the work in the fact that a second edition appeared in 1652, and a third in 1659.

To its success Fuller himself alluded, with a pardonable pride, when (in answer to his opponent, Dr. Heylyn, who also had written a description of Palestine in his "Microcosmography," and who perhaps regarded Fuller as a poacher on his estate) he said that his book (by God's good-

ness) had "met with a favourable reception," and that it was "likely to live when I am dead; so that friends of quality solicit me to teach it the Latin language." A fourth edition appeared in 1662; but no further publication of it occurred until a year or two since, when Mr. Tegg issued a small-sized reprint, with clever fac-similes of the maps, reduced in size.

In all respects the "Pisgah Sight" was worthy of Fuller's sacred calling. An ardent antiquary himself, Fuller carried his favourite pursuit into his profession. To him, as to his contemporary, Browne of Norwich, "The Ancient of Days" was the antiquary's truest object. The "Pisgah" reverently sprang from his affection for the Bible; for (to use his own expression) next to God the Word, he loved the word of God. Hence the Bible is the chief authority for his work. We find him saying (book v. 170), "Let God be true and every man a liar. I profess myself a *pure leveller*, desiring that all human conceits (though built on most specious bottoms) may be laid flat and prostrated if opposing the *written word*." None of his books so markedly shows how well acquainted the writer was with his Bible. Probably every topographical verse is inserted, and a very great many others. He was an "exact text-man," and was especially happy in making Scripture expound itself. "Diamonds," he would say, "only cut diamonds." Josephus, of course, ranks as his next authority. Fuller thought that, notwithstanding the faults of that author, "the main bulk of his book deserved commendation, if not admiration; no doubt at the first compiled and since preserved by the special providence of God to reflect much light on the Scriptures." He is at pains to free Josephus from the strictures of Baronius, on the ground that the former may have fallen into involuntary errors. It is in this defence of Josephus that Fuller forestalled, if he did not inspire, a well-known passage\* in one of Wordsworth's ecclesiastical sonnets:

"Historians who have no faults are only fit to write the actions of those princes and peoples who have no miscarriages; and only an angel's pen, taken from his own wing, is proper to describe the story of the Church triumphant."—(ii. 148.)

In illustration of his work, Fuller made besides an occasional use of the Rabbins; but this field of illustration he left to his friend, Dr. John Lightfoot, who, by a curious coincidence, had planned a similar work to that of Fuller. The references of these two scholars to each other in their respective books are most cordial, notwithstanding that each in a manner balked the designs of the other.

Fuller also brought under contribution many of the old writers on Palestine; we find him quoting, among others, Pliny, Jerome, Ptole-

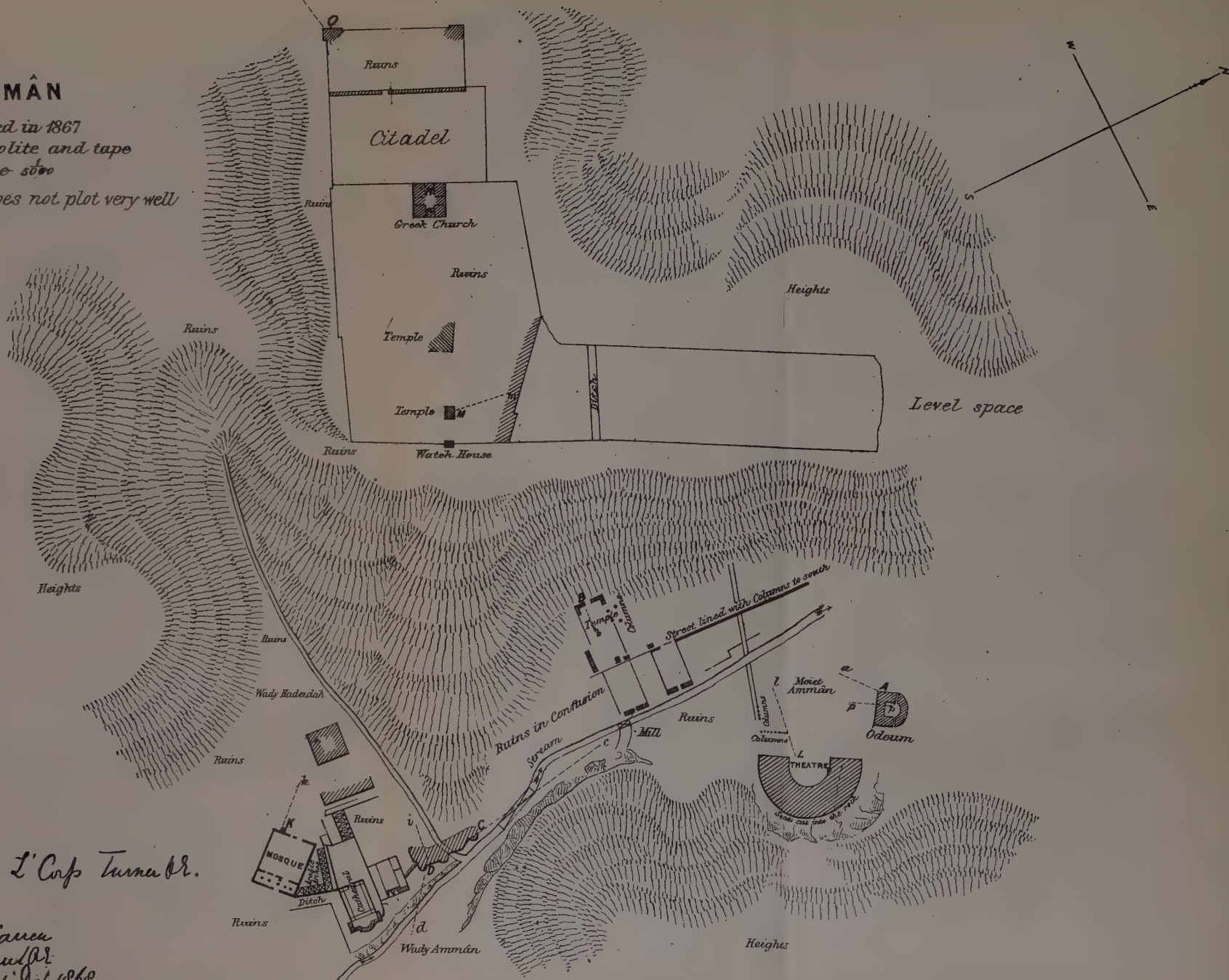
\* "There are no colours in the fairest sky  
So fair as these. The feather whence the pen  
Was shaped that traced the lives of these good men  
Dropped from an angel's wing."



# AMMAN

Surveyed in 1867  
with Theodolite and tape  
Scale 5000

The Citadel does not plot very well



Traced by L'Corp Turner R.

Charles Warren  
Lieut. R.  
1<sup>st</sup> Dec. 1868





meus, Villepandas, Arias Montanus, Adricomius, Bocartus, &c. Of *travellers* he consulted Brocardus, Breidenbachius (whose description, he says, was "neither divided into leaves, pages, columns, nor chapters," book ii. 149), Morison, Biddulph ("a late English divine," book ii. 140), Munster, Bunting, &c. Sandys, the famous eastern traveller, personally known to Fuller (who says of him that he "spared other men's pains in going to the Holy Land by bringing the Holy Land home to them, so lively is his description thereof" \*), is very often mentioned.

In addition to his familiarity with the literature of the subject, Fuller evinces a considerable critical skill in his discussion of topics connected with geography, history, and divinity; the learning, indeed, which he displays throughout is both deep and solid. We see as we read that the author was one of those "*gulfs* of learning" who were not singular in that age.

J. E. B.

## EXPEDITION TO THE EAST OF JORDAN.

BY THE REV. A. E. NORTHEY.

ON Tuesday, the 18th of April, 1871, about one o'clock in the afternoon, we started—a party of five—on our trip across the Jordan, intending to encamp the first night at Ain Sultân.

We were at last about to accomplish our long-cherished plan of visiting the country east of the Jordan, the chief points of interest being Mount Nebo, Heshbon, Ammân, and Gerash, with the intervening country. After a long lingering look at the view of Jerusalem from the Mount of Olives, and a grope into the so-called tomb of Lazarus at Bethany, we mounted our horses and commenced the rapid and rocky descent from Jerusalem to Jericho, so well known to all Eastern pilgrims. This remarkable region, with its intersection by enormous ravines like the Wady Kelt, its curious geological features, and by no means scanty botanical treasures, is well worthy of a careful and scientific exploration, even independent of its Biblical interest. Immediately after passing the khan, about which wandered ghoul-like the forms of three Turkish soldiers, who are posted here during the season of the Jordan pilgrims, our Adwan guide led us, by a track on the left-hand side, to the summit of a peak, from which we gained a varied and extensive view over the country in every direction. Following this track, instead of returning to the main road, we skirted some of the heights which overhang Wady Kelt. The views are well worth a scramble, far surpassing those which we had seen on a former occasion from the main route. An additional elevation of a couple of hundred feet often discloses, as every traveller knows, an entirely new series of views. This was the case now; we could see well into our promised

\* "*Worthies of England*," § Yorkshire.

land, the East of Jordan; Nimrîn, Wady Hesbân, Keferein, and other places which we proposed to include in our route, were pointed out to us; and the Ghor, with its graduated tints of dark and light green, yellow and white, stretched its long, narrow valley far up towards the north. Lovely peeps of the Dead Sea, and of the pink and purple mountains beyond, opened out now and then on our right, while on our left the enormous ravine of the Wady Kelt forbade too near approach as we endeavoured to peer down into its depths.

All round us lay the billowy masses of the rocky wilderness, heaped about in endless confusion. Egyptian vultures and buzzards were soaring far overhead, as we leisurely descended, feasting our eyes upon the gorgeous sunset tints of purple, pink, and rose, into the Jordan valley. In the evening glow the white mounds, or mamelons, of cretaceous deposit in the centre of the Ghor might, with no great effort of imagination, be spirited into the fairy vision of a city fringing the river banks. Just before dark we reached our tents, pitched on the farther side of Ain Sultân, the usual camping-place being occupied by a huge caravanserai of eighty-four middies of H.M.S. "Trafalgar," accompanied by some of their officers and the Bishop of Gibraltar. In front of our tents was a dense mass of wood, chiefly nebk, destined to be often a thorn in our flesh. Far away in the distance, as we turned to look southward, rose the heights of Nebo on the left and of Nebi Musa on the right, with a partial glimpse of the Dead Sea between them. Behind us stood Mons Quarantania and its neighbours.

We had of course before leaving Jerusalem concluded our contract with the Adwans; Sheikh Goblan being at some distant place out of reach, the bargain with us had been made by his brother, Sheikh Fallah. Owing to some vigorous measures of the Turkish government, and the increased number of travellers, the demands of these Arabs have lately been much reduced. The fee paid is not levied as blackmail, but is simply a sort of "police and guide rate." We found it by no means excessive; it would contrast very favourably with the demands of Swiss or Pyrenees guides along paths where no one with two eyes in his head can possibly miss his way. We agreed to pay £10 for escort and guides, leaving to them to fix the number of men who should accompany us: this was usually about a dozen. We were to visit all the places of interest which we mentioned, and any others which they liked to show us, and were to encamp where and as we pleased, merely giving them a general idea of our contemplated route, and of the time for which we should require their services, which we estimated at ten or twelve days. They were to be responsible for all losses, and to secure us from any trouble or danger. We had every reason to be satisfied with their performance of the contract; they were perfectly faithful and honourable; indeed, we liked them exceedingly, and were only sorry that our limited stock of Arabic prevented conversation with them. Sheikh Fallah and a fine young fellow, Abdul Asiz's son, were excellent guides, most willing to show us all they could and to tell us all the

names of the wadies, jebels, and beit gadeem (ruins), about which we plagued them considerably. They often went out of their way to show us a view or a ruin, were courteous and intelligent, and never gave us a moment's trouble. Goblan turned up at Ain Sultân, and grumbled slightly at the too favourable terms, as he thought, of the contract made on his behalf; however, he was soon appeased by the promise of "a little something extra." This included, our trip cost us £15 extra, £3 a piece, which cannot be called extravagant for ten days. It was well worth it.

The next morning, after a delicious bathe in Elisha's fountain and a good breakfast, we set to work to explore the ruins and thickets situated at the foot of Mons Quarantania. The ruins consist of fragments of water-conduits, mills, and houses, of no great antiquity; here and there were patches of cultivated land, fenced in by a hedge of dead cut thorn-branches, a most effective obstacle to the entrance of a trespassing Howadj. Farther north, close under the hills, the glen or oasis of Ain-el-Dûk is very fertile, though thorny trees and bushes abound. Birds were plentiful, including large flocks of the lovely rollers, quails, partridges, buzzards, hopping-thrushes, and others. After a while, we assembled our scattered forces, and descended leisurely to the River Jordan, which we reached in about two hours. The whole of this portion of the Ghor is stony, like the dry bed of a torrent, full of boulders and pebbles, one gigantic wady. The heat was great, but the air not sultry.

On arriving at the bank of the river, near En Nwaimeh Ford, we found to our surprise a large and well-built ferry-boat, which transported us, our animals, and our effects, over to the other side in a very few minutes. A most picturesque scene it was; different indeed from that which we had last witnessed at the Jordan, when its banks and its waters were crowded with Easter pilgrims. Now all was peaceful, still, and tropical; canes, willows, and tamarisks clothed the river with dense masses of green; birds sung and fluttered gaily about, and the plash of the wet rope in the rapid current caught refreshingly our ears as we lay gasping in the noon-day heat. And now we touched the eastern bank; our feet trod the land on the East of Jordan; we felt now that we were really starting; and we indulged in a traveller's pardonable exultation at the prospect of leaving the beaten track, and seeing with our own eyes that fair land of Gilead, which had been possessed by Moab and Ammon, Sihon and Og, Reuben and Gad, but of which all the splendour, in monuments made by man, dates from its history as a province of Imperial Rome. We looked forward with keen delight to our contemplated trip, which, indeed, did not disappoint us. It is of the highest interest, and being now easy of accomplishment, should on no account be omitted by any who wish to gain a complete acquaintance with the inheritance of the Twelve Tribes—the entire land of promise.

At 1.30 we left the eastern bank of the river, and riding leisurely, reached Nimrîn in two hours and a half. The bottom or bed of the Ghor

here is of the same character as on the other side. On approaching Nimrîn, we noticed some fields of wheat, of considerable extent, well cultivated and weeded; and gathered some of the little round fruit of the Dôm-trees, which was just ripe; it is somewhat like a medlar, pulpy, and slightly sweet. Camping here, we had time and light to go out and explore the place. Of ruins there is not much. Some old mills and conduits, and one building, prettily situated on an eminence, which at a distance might pass muster as a dilapidated church, was all that we could find. Nature was more inviting. At Nimrîn we had our first experience of the fine gushing streams that are so delicious and fertilising on the east of Jordan. A bathe in the deep pools of this one, under a bower of huge canes and flowering oleanders, is a very elysium in Syria. The vegetation is tropical; there were many young plants of the Osher, or Sodom apple, with its fine handsome foliage, and castor-oil plants growing to the size of a large apple-tree. The Dôm-trees have exactly the growth and appearance of our black-thorn, and the leaves are like large sloe-leaves. From Nimrîn we looked back, with some degree of triumph, at the western side of Jordan, the hills of Judæa, the gorge or huge crack, as it now appeared to us, of Wady Kelt, the green oases of Er-Riha, Ain Sultân, Ain Dûk on the other side, and of Keferein and Wady Seisaban on this side Jordan. Here we shot several birds, two species of shrike, and others. Thermometer inside the tent at night 77° Fahrenheit.

Thursday, April 20th.—We had intended following Dr. Tristram's route as nearly as possible, but Fallah wished to show us some ruins in another direction, which he said were better than anything to be seen at Keferein. We therefore struck nearly due east, instead of turning south to Keferein, and in half an hour left the Ghor, and entered into a rocky gorge or glen. About a mile up this we passed a ruined bridge; the smooth slopes of the hills on either side (unterraced, as Dr. Tristram remarks) were covered with flowers, among which we recognised several old garden acquaintances, borage, camomile, sage, mustard, hollyhocks, and others. The only trees were nebk and hawthorns. Partridges abounded. The strata, all of limestone, dipped N.W. at an angle of 10° to 15°, but in many places they were much contorted. As we mounted, the views were beautiful over the Jordan valley, the Dead Sea, and the Judæan hills, which looked considerably lower than the Moab hills do from the west. The roads from Er-Riha to Marsaba and Jerusalem were distinctly visible.

After two hours' ride we came to a ruin called Sûr, one of the claimants to the site of the ancient Jazer. There is, however, but little here, and it seems to me that Khirbet Sûr, in the valley below, is more probably the true site. The position of Sûr, on a lofty spur or ridge overlooking Wady Sûr, is fine, but the ground is so uneven, that there is not room for a town of any size. The ruins consist merely of a rough wall in the shape of an irregular triangle, the longest side 350 yards in length, with semicircular buttresses or turrets projecting every 50 yards. The



wall is about 6ft. thick. There is a well at the N.E. corner, but no hewn stones anywhere, and nothing to reveal the age of the building.

From Sûr a ride of an hour and a half over high ridges, with fine views over Wady Sidr (Sûr?), Wady Keferein, and the country round, brought us to Arak-el-Emir, when, passing the ruins of Hyrcanus' palace, we descended at once to the Wady Seir, where we found a charming place for lunch under magnificent oleanders by the side of a rushing stream. The oleanders here grow with immense vigour, attaining a height of 40 or 50 ft.; there are also some very fine plane-trees. The stream was full of shells. After lunch we first explored the caves in the rock cliffs to the north of the palace or castle. Great chambers have been hollowed out, perhaps originally natural cavities, but greatly enlarged and shaped by artificial means. One which we measured was 45ft. by 33ft., and about 20ft. high; another 54ft. by 36ft., and 28ft. high. To each of these chambers there were two openings; one a kind of square window, 12ft. high by 6ft. wide; the other a rough square doorway below. At the side of the entrances was an inscription or name in ancient Samaritan, the same in both cases.

Beyond these was another chamber, longer, narrower, and lower, which had been used as a stable. It is 96ft. in length; round the sides is a range of stone mangers cut out of the solid rock, about 3ft. high. Close by is a round cistern, 12ft. in diameter, as well as many other caves and passages, the entrance to some of which was purposely made by Hyrcanus as difficult as possible. Two large squared stones, standing up edgewise, with a chequer pattern on them, puzzled us, as they have puzzled every one who has seen them. Due east of these cavernous chambers, at the distance of half a mile, are some remains; smoothed rocks, steps cut in the rock, and a niche in the shape of a square panelled recess, about 1ft. in depth. A little south of this lay the entrance gateway, built of large stones squared and finished with the Jewish bevel. The aperture of the gate was 12ft. wide; one stone measured 11ft. in length by 5ft. in width. From this gateway to the castle was a raised causeway, with some perforated stones placed on it at intervals. Of the castle itself, all that remains standing is part of the front or façade, built of stones of enormous size, with a frieze of about 12ft. in height, on which are huge lions sculptured in bold alto-relievo. All about lie great fragments of the building, pieces of columns, friezes, with triglyphs and metopes, cornices, and some very fine and elaborate mouldings, all of the Doric style. Some of the stones measure 20ft. by 8ft., beautifully finished with the Jewish bevel.

The castle stands on a raised platform, in the middle of a walled enclosure of ten or twelve acres, of which the traces can still be seen. The position and scenery around are beautiful, and Hyrcanus was a wise man to choose so charming a spot for his enforced retirement. The glen to the N.E. above Wady Seir, the cliffs, the sides of the hills covered with oaks and terebinths, with the undulating verdant slopes below, make a lovely landscape, not unlike some parts of Wales.



We started from Arak-el-Emir at 4.30, keeping nearly due south, descended by the right side of Wady Seir, crossed Wady Keferein, and mounting the hill to the south of it, reached our camp in two hours. Our tents were pitched high up on the side of the hill, below and north-east of Jebel Jabud, facing Wady Seir, in a romantic and picturesque spot.

Friday, April 21st.—Having been invited by Sheikh Goblan to dinner, and having learnt that it was against all etiquette to present ourselves before midday, we did not move from our encampment till ten o'clock. We then ascended Jebel Jabud, 2,700 ft. high,\* from which we had a magnificent view in every direction. Keeping along very high ground, we arrived just at noon at Goblan's village, to which he welcomed us with dignified courtesy. He took us into a large long tent, with a partition at one end screening off the women, children, and puppies. Seating ourselves as well as we could after their cross-legged fashion on rugs and carpets, we were presented with coffee and a sweet aromatic mixture. After an interval, two attendants brought in an immense iron cauldron or dish, in which was piled a mass of stewed mutton and rice. We set to work with our fingers, and finding the mess palatable enough, and not so greasy as we anticipated, did our duty manfully. We could not emulate Goblan's dexterity in making balls of oily rice with the three fingers of the right hand, which was evidently a sign of Adwan *haut ton*, but we found that knives and forks were after all but useless encumbrances of advanced civilisation. Goblan supplied not only mutton and rice but also soap and water, and as we washed our fingers, the mountain of food vanished before the attack of hungry Arabs. A sheep is evidently not killed every day. After our repast Goblan showed us a picture of the Crown Prince of Prussia, with which he had been presented, and asked intelligent questions about the war and various other matters.

All this time, ceremoniously wasted, we were longing to scale Mount Nebo; so, as soon as manners would permit, we rose, thanked our host for his hospitality, and proceeded. Passing for an hour through pretty rocky wadies, we came suddenly upon our tents, already pitched (2 p.m.) in the Wady Hesbân. We had, however, still almost our whole day's work before us. Descending Wady Hesbân south-west for half an hour, we passed Ain Suderah, and then turning to our left south-east, entered Wady Suderah, and through this and other wadies mounted steadily for three hours till we reached Jebel Nebba.

We were now certainly upon the height called by the Adwan Jebel Nebba, and pointed out to travellers as such. Wady Ayun Musa lies to the north, Wady el Gedic to the south. But the view was to us a

\* For all altitudes referred to I am indebted to Captain Warren's table, given pp. 307-310; as also for some of the orthography. I much regret that I had not with me in our journey his most accurate and valuable itinerary. To all these altitudes may be added (roughly) 1,000 feet, to give the height above the Ghor, the nearest low level.

little disappointing. It was much the same as that from Jebel Jabud; there was higher ground to the south which entirely intercepted our view, and even prevented our seeing the whole of the Dead Sea. We had not time, or we should certainly have gone for about another hour southward, when, I fancy, the highest point of the range would be gained. Whether the view from thence over the country west of Jordan and Jericho would be equally commanding, of course I cannot say; but it would be worth trying. Fallah, at all events, had taken us to what they call Jebel Nebba; there were several eminences more easy to reach, which would have satisfied our ignorance equally well; but they pushed on to this point, so that we may be confident that our guides regard it as such. The view, at least, must be very nearly the same as that seen by the great Prophet—a glorious one, after all, it is. The exact spot visited by us may be identified by one special characteristic. The field, or hog's back, through which we passed on turning westward from the road in order to reach the summit, is full of deep holes—traps for falls to unwary travellers' horses. Cantering enthusiasts will probably examine a little too closely, as did two of our party, the rock of which Mount Nebo is composed. Arab agriculture will not quickly alter this characteristic.

It was nearly five o'clock before we started on our way back to our camp. We did not retrace our steps, but kept on the high ridge which lies between the plateau El Belka and the hills which slope down to the Ghor and the Dead Sea. This El Belka consists of immense rolling plains of corn, like those near Gaza, beyond which rises a wall of hills forming the boundary of the great Arabian plateau. We reached Hesbân at six, when it was getting dusk, and had not time to explore the ruins, which, though scattered and fragmentary, are of great interest. They are of all periods, but chiefly Roman; and consist of arches, broken columns, entablatures, wells, cisterns, &c. One space, about forty yards by twenty, contains a pavement in good preservation, with the bases of four large Doric columns at one end, and other broken columns. It was not apparently a temple; perhaps a small forum or market-place. The position of Hesbân is high, commanding a fine view.

Continuing our ride by El Al (Elealeh), night overtook us; the stars and a thin crescent moon shone brightly as we stumbled down a small wady leading into Wady Hesbân, by a frightfully rocky path to thread in the dark. We arrived, however, safely at eight p.m. The strata in this district, which is more rocky than farther north, are exactly of the same character as those of the hills about Bethlehem and the Mount of Olives—limestone with layers of flint; there are no traces of igneous action. The flowers and plants were also, as far as we could judge, identical with those on the west of Jordan.

Waking the next day, Saturday, the 22nd, to find ourselves close to a delicious spring bubbling like crystal out of the rock, Ain Hesbân, we had a most refreshing bathe, and after breakfast bade adieu

to Goblan, who did not wish to accompany us farther. He paid us many compliments, wished us a happy journey, and took with quiet dignity the liberal baksheesh which we put into his hand, delicately wrapped up in a piece of paper. He went back to his village, taking with him his son, a nice bright boy of ten.

We then went up Wady Hesbân in a north-easterly direction, which we followed all day. The wady just above Ain Hesbân is very pretty, being in fact a rocky glen; large masses of rock detached from the cliffs, on either side lay strewn about, embedded in a tangled and luxuriant growth of shrubs and flowers, with here and there a fine old terebinth. Passed a hermit's cave, with an arch built over an entrance to it.

In an hour's time we came to a small ruin on the top of a circular tell called Um-al-Khanafish, and then emerged upon a high plateau of downs, like a Scotch moor and Sussex down combined. A knoll on the left was crowned by a cluster of pines, and the downs were covered with a fragrant thorny bush and many flowers. At eleven we reached Jebel Naûr, from which we had a fine view, embracing Jebel Osha (Mount Gilead), Sûr, and the hills about Hesbân; also a good deal of the country beyond Jordan. The hills on the west of Jordan present from this point a straight outline as far as Nablus, and then appear broken and irregular. Thermometer, 68° in shade, 91° in sun. Slight breeze from N.W. Wady Maûr, according to our informants, undoubtedly flows into Wady el Bahar, not into Wady Hesbân. Descending from this height, and threading these high undulating downs, we passed several Arab encampments, at one of which we were presented with some butter-milk in a not very lordly dish, and in an hour arrived at a ruin called Mousymak (Um as Samâk).

These ruins are of considerable extent and importance, of the Roman period. Buildings, of which the walls are still to some extent standing, extend in one direction more than 400 yards. A great many columns, capitals, pieces of frieze, bases, and other fragments, strew the ground. We found one column slightly fluted, one immense stone with the Jewish bevel, several Corinthian capitals and one Ionic; another stone also, with some Maltese crosses cut upon it. In the centre of the town is a platform, either for forum or temple, several wells, gateways, and well-built walls. We could not stop long enough to explore it properly, and I recommend it to the notice of future travellers. From Um as Samâk an hour's ride brought us to the summit of Jebel Tahîn, a rather low but conspicuous eminence in the middle of an elevated and undulating plateau; there was a fine view to the east towards the Hauran, but not much else. Tracking still to N.E., we reached Ammân in an hour and a half, entering Wady Ammân near a bridge over the stream, just south of the city.

One gaunt column on the left immediately caught our eye, then as we defiled into the valley, others revealed themselves; next, a pretty little temple; until as we wound up it, we found ourselves walking through a veritable city of the past. A wonderful ruin is Ammân. The

buildings stand, many of them fairly perfect, silent witnesses to a once teeming population. Temples, churches, theatres, public and private buildings, crowd one another, but all are desolate, and there are no inhabitants of the "city of waters" save storks and owls. Soon we caught sight of our tents, pitched at the farther end of the city, close to a row of eight columns, under the shadow, almost in the proscenium, of the Great Theatre, and backed by the clear stream. Here was, indeed, something to be seen! The Adwan had not been using hyperbole when they said that the Hawadjat would find Ammân "good and beautiful." We congratulated ourselves that we had arranged to spend here the whole of the next day, Sunday. We had still two hours' daylight, so we at once set to work to look about us; and during our stay we did what we could to gain a general idea of the place, which, I am glad to think, will at the hands of the American Expedition soon receive a careful and systematic exploration. The accompanying plan, inserted by the kind permission of Captain Warren, will facilitate explanation.

The city of Ammân, Rabbath Ammon or the "city of the waters," which Joab besieged, and where Uriah was killed, and later the Roman Philadelphia, lay, as will be seen in the afterwards-plan, in two narrow valleys, through which flow two small streams, one through Wady Hadâdeh from the north-west, and the other through Wady Ammân from the south-east. These unite near the building c d, and continue their course north-east through Wady Ammân. When we were there, the stream in Wady Hadâdeh was dry, but Moïet Ammân, as it is called, had a good supply of water, and there were pools large and deep enough for a swim. Crowning the height on the north-west, the shoulder between the two valleys, rose the citadel, holding a commanding position over these valleys and the country round. The valley is most contracted between the foot of the citadel and the great theatre, the valley widening as it extends south, though the rocky heights advance on the eastern side close up to the stream near point c, and then again recede. The chief buildings of interest have been well and accurately described by Dr. Tristram, and some measurements have been taken by Captain Warren (p. 295). I will therefore only give a few of the results of our too hasty investigation.

The main stream, Moïet Ammân, was paved and faced with stone quays, and there seem to have been two or three terraces, portions of which were probably colonnaded, rising one above another, and parallel with the stream. From the ruined bridge (c) as far as the still perfect bridge (C), a distance of 150 yards, can be traced spring stones for arches, suggesting that the stream was covered over for this distance.

The most interesting remains are the two theatres, the walls of the citadel at the north and west corners, the Byzantine church and great temple within the citadel, the two churches in the valley, and two temples. Amidst the mass of *débris* of masonry, often covered with rank vegetation, rise numerous columns or fragments of columns, and the walls of various buildings are still easily traceable.



Approaching the city, as we did, from the south, 500 yards above the bridge which once spanned the stream, we first come to a beautiful little Corinthian temple. It is 18ft. square inside, and was roofed with a dome. On the east side was a large window, which, as well as the whole of the exterior on that side, was richly decorated. Nearly half the original building, which must have been a perfect little gem, remains standing. 230 paces north of this temple is a rectangular enclosure 40 paces by 80, the walls of which were of massive masonry, the stones being dovetailed in a curious way. Beyond this lies the ruin of what is called the cathedral of Ammân (κ). Captain Warren suggests that it may have been a mosque. It does not lie east and west. It is a large rectangular building, measuring 181ft. by 120ft., 35ft. at the end being cut off by a wall, perhaps as a sanctuary. There were three entrance gateways, and a tower at the corner with a circular stone staircase of 33 steps, from the summit of which we gained an extensive view of the city and valley of Ammân. To the east and north of this is a great chaos of ruined walls and houses, gateways, vestibules, at the river-end of which is another church (cathedral?) which remains in such preservation as to be distinctly traceable. It must have been very pretty when perfect, and excellent in its proportions. It consisted of a nave and two aisles, the nave 40ft., and the aisles each 20ft. in width, making a total of 80ft. At the east end of the aisles were square chapels, forming with the nave a kind of transept, and in the centre beyond a small apse; total length, 150ft. Fragments of columns of various coloured marbles point to a considerable richness of internal decoration.

North of this again is a small building with some pointed arches; and immediately beyond this, the building marked D, of which it is impossible now to define the shape or size. A great mass of masonry still remains, with niches, arches, and windows in it, and the face towards the stream consists of two massive round bastions. Two columns only still stand *in situ*. North of this is a bridge near point C still spanning the stream; and following the stream some distance we come to what was probably the forum—a rectangular space of 140 paces by 70, surrounded by a colonnade, and flanked by the great Theatre and Odeum. Eight columns, with their architrave, still stand upright, and a few others are to be seen about. Here is the most striking group of ruins; nothing can exceed the grandeur of the large theatre, crowned by the rocks out of which its semicircle has been hewn. Resting thus against the rock, with its forty-three tiers of seats still visible, its passages, corridors, galleries, and vestibules, it must have been a splendid building, capable of holding six or eight thousand persons. The small Theatre or Odeum, immediately adjoining, which could be almost perfectly restored if its fallen pieces were put together again, must have been a beautiful little gem in the Corinthian style, on which was lavished all the ornamentation of the Roman period.

Crossing the stream, our eye is attracted by a picturesque ruined



temple (B) of rich Corinthian style, one side of the altar end or *adytum* being still fairly perfect. And now, to scale the citadel hill, a formidable climb has to be encountered, though the view and the remains at the top well repay the trouble. A small ruin on the brow may have acted as a watch-tower or guard-house, and a few yards behind this are the ruins of a colossal temple (M), very probably dedicated to the Sun, like those at Gerash and Baalbec. The columns were of immense size. To the north-west of this, hidden down among the *d'bris*, lies the beautiful little Byzantine church (N) first discovered by Dr. Tristram. This requires searching for, as it may be easily overlooked, being now, if not originally, underground. It is in the form of a Greek cross, and is a perfect study of Byzantine ornamentation. Round the whole of the interior is a series of small round-headed arches, in which are carved patterns of flowers and other objects, all elaborate, and each one of distinct design. It was probably roofed with a dome. This church lies in the midst of a mass of ruins in endless confusion, which are bounded on the north and west by some fine walls of massive masonry forming the escarpment of the citadel on that side, which requires more defence than the others.

From this angle (O) a walk down Wady Hadâdeh takes us through a great many ruined houses, broken columns, reservoirs, &c., too numerous to particularise and difficult to trace.

The ruins of Ammân are undoubtedly of the highest interest; for beauty of ornamentation they will bear comparison with those of any Roman city; not so extensive as those of Gerash, nor so Cyclopean as the few that remain at Baalbec, they are more varied in style and period, and some individual buildings, notably the great theatre and the Byzantine church, are very striking. The Roman Philadelphia is what we see; what may be underneath of Rabbath Ammon we cannot say; but the magnificence of this, a provincial city of the empire, is quite astonishing. We enjoyed our Sunday here immensely; 2 Sam. xxi., which we read at our little service, had almost a weird interest. We celebrated our stay by giving our Adwan friends a sheep, which cost half a napoleon. The night was fine and cool. Thermometer 65°.

Monday, April 24.—After a nocturnal serenade of jackals we turned out early, and were soon on our way to Es-Salt, turning up Wady Hadâdeh to north-west, and then below the north front of the citadel to the north-east. Presently we entered and passed through a very pretty country, consisting of a series of park-like rocky glens, the grey rocks cropping out from the luxuriant herbage, and fine terebinths of every size and shape supplying the picturesqueness of timber, which is so sadly wanting in Palestine. In two hours we reached Yajus, where are the remains of a city or town finely situated in a fertile upland valley-plain. But little, however, is left, and the ruins tell no tale, consisting only of a few pieces of fine masonry, through which terebinths, 15 to 20 feet in circumference, have forced their way. An hour or so beyond this, we reached El Jabwâya, where are some more ruins;

sarcophagi, lintels, cornices lie strewn about; and from the hill a fine view is obtained over the Hauran, and the country towards Nablûs and Tiberias. Here we had lunch, washing it down with some fresh milk taken from goats that came opportunely within hail. Proceeding north we soon had a beautiful view across a valley called El Beja, on Gerash and the hills of Ajlun; Gerash could just be descried through our glasses. Passed through several wide valleys, or plains, mostly full of wheat, now showing the ear well. Beyond these, to the south-west, were ranges of hills, thickly clothed with forests of terebinth and holm-oak, extending for several miles. Crossing the deep Wady El Azrak and another ridge we reached Es-Salt at six p.m., finding ourselves during the latter part of our ride in company with a gradually accumulating crowd of Bedouins, flocks of goats, diminutive cattle, donkeys with the Arab ploughs on their backs, children, and dogs, all converging at evening to the sheltering cover of the town of Es-Salt. This day and yesterday we had seen enormous droves of camels, flocks of goats, and other signs of pastoral wealth. Arriving half an hour before sunset, we had just time to climb to the castle, garrisoned by Turkish soldiers; there is nothing in it of interest. It has a fine and commanding position—that, without much doubt, of the ancient frontier fortress Ramoth Gilead, which gave the kings of Israel so much trouble to conquer and to retain. The town, the first we had met with on the east of Jordan, is well built, and the environs well cultivated, with figs, olives, and pomegranates. It is also famed for its raisins. North of Es-Salt the population is more settled, and most of the towns are built of stone.

The next day, Tuesday, the 25th, we started to climb Jebel Osha, Mount Gilead. Threading some very pretty rocky glens and valleys, the lower portions of which were often terraced for vineyards, and the upper clothed with small trees and brushwood, we gained the summit in a little more than an hour. This is 3,470ft. above the sea. The tomb or wely of Neby Osha, the Prophet Hosea, after whom the mountain is now named, stands close by a magnificent holm-oak of great size. The view is exceedingly fine; no traveller should miss it. Looking across the Ghor, Ebal and Gerizim are clearly visible, and the whole of the country on the opposite side as far as Tiberias. On the right Jebel Ajlun bounded our view, and snow-capped Hermon still eluded us, though it is no doubt visible under favourable circumstances. To the left and behind us, south and east, lay the rolling highlands of Gilead, for the most part clothed with forests of oak, ilex, and terebinth. Having enjoyed this as long as we could, we descended nearly due east, and in a short time found ourselves in the direct road from Es-Salt to Gerash. This we did not intend to do, and it is a mistake. Travellers should insist upon getting down the hill somewhere nearly due north and passing by Jilad, Allân, and Shihân, a route apparently, from Dr. Tristram's description, much more picturesque than that which we followed. We passed through some open valleys and plains, rather bare, of which the most prominent and best cultivated is that

known as El-Beja (Al Bukâa?). At the north-east corner of this we again entered a woody glen, and winding down Wady Român, and across a ridge at the head of it, descended into Wady Zerka, the valley of the ancient Jabbok. This is a fine wide valley, and forms the principal drain of Gilead; the scenery is not unlike parts of Wales and the Tyrol. Just before coming to our tents, pitched in a beautiful level meadow on the other side of the stream, a wild cat and a jackal gave us an exciting chase; a volley of shot at the dripping jackal across the river only made him shake his ears. We found the Zerka a rapid stream, only to be waded at certain spots; oleanders and other shrubs fringed its banks, and our meadow was full of the most luxuriant vegetation. Here we encamped by the grateful stream, in the country of Jephthah and on the borders of Sihon and Og. The night was fresh and beautiful.

Wednesday, April 26.—After a dip in the swift stream, we mounted the hills behind us, and in about an hour and a half found ourselves at Gerash. This is indeed a wonderful and magnificent ruin. Undevastated by the hand of man, all its main features distinctly traceable, many of the noble buildings standing, though partially ruined, two hundred and thirty columns still erect, baths, theatres, temples, circus, forum, triumphal arch, recalling with no effort of imagination its former splendour, it is glorious and striking—a glorious ruin, a striking desolation. Pompeii alone, of all the ruins that I have seen, may be compared to it. At every turn are picturesque subjects for sketches, at every corner food for reflection. The position of the city was very fine; situated on a sloping hill, in the middle of the highland about 2,000ft. above the sea, it was conspicuous and central. The line of the outer walls is clearly seen, and can be easily traced. Outside of them, to the south, at the end of a long street, was a triumphal arch. Passing on and through a gateway in the walls, we soon enter the forum, an oval space surrounded by Ionic columns, of which fifty-seven are still standing. From the end of this a street extends for half a mile, crossed by another at right angles, and these two were both colonnaded, many of the columns still remaining. Here and there are square blocks or courts, porticos, portions of temples or public buildings, with columns erect or prostrate by the score. One once fine temple, of which not a single column is now standing, stands on an eminence above the forum, overlooking this and the main street; it is of good proportions and exquisite finish, and when perfect must have been a beautiful and conspicuous object. Near it is the large theatre, still very perfect, as is also the smaller theatre at the other end of the town. Baths also there are, and a vast quantity of buildings of less note.

But the gem, the glory of the city, is the Temple of the Sun. This with its propylæa and peristyle must have been magnificent. The portico and cell of the temple itself are still nearly complete, eleven out of twelve of the huge columns still standing *in situ*. It was a rare treat to sit in the shadow of one of them, looking at the rich

sunlight lighting up the rest, and thinking of the scenes which those columns must have witnessed. The tide of civilised life had ebbed, rolled back, and left Gerash stranded on its shore. As we sat there in absolute stillness, the only inhabitants we could note were a chameleon which peeped out of a crack, and a little owl that flew out of the sanctuary. Truly this is one of the "cities not inhabited." Never have I seen anything more striking than this lone and desolate city; it is a wonderful scene of grandeur suddenly eclipsed.

We found several inscriptions, some of which we copied. In reference to that given in p. 389, we can corroborate *λημης* in line 2, and *με θεον* in line 3, though there are cracks in both places. In line 9 *μετωπω* is correct. Another of some interest is the following, of which, however, it is almost impossible to decipher the latter portion. It is in honour of a Christian martyr.

Δομος εμι αεθλοφορου Θεοδωρου μαρτυρος αθαν (ατου) ωκεανω σωμα γαρ ενται . . . (εστι) η ψυχη δ'εις ουρανον ευρυν αγγελθη (?) Τελεο εικατη ραον ερμ . . . .  
 αγγρικ . . . . και νορης και εωρμενο . . . . μαρτυριον ηωιατης . . . . ινα κανηλθεν  
 ταπε (ινος ?) . . . .

In the evening Sheikh Jusuf of Suf came to volunteer his services and show us his testimonials; as we knew the value of both, we did not cultivate his acquaintance, but our dragoman gave him a retaining fee for the sake of peace and quietness. A moonlight stroll to the Forum, the Via Columnata, and the Temple of the Sun concluded our most delightful and interesting day at Gerash.

Thursday, April 27.—After one more stroll amongst the ruins, we left with regret the grand city; but we could afford no more time, for we were anxious to be at Nablûs by Sunday. Our ride this day was the most beautiful we had in Syria. The weather was delightful, sunny and balmy, and the views lovely at every turn. We began by mounting the hill behind Gerash, going nearly due west. Passing the village of Reimun, we skirted along the side of a hill, with the fine valley of Suf on our right, till we came to the village of that name. On our left as we rode along were groves of olives, backed by pines and fronted by green patches of wheat, or by the rich brown soil newly ploughed for sowing maize. On our right in the valley below was a good deal of cultivated land, with wheat, olives, figs, and pomegranates. Immediately beyond the village of Suf, a filthy place, we entered a lovely rocky glen, opening out here and there into wild and rough land which reminded us of many a spot in Wales and England. We then plunged into a fine forest of oaks, with a few firs and terebinths, and after crossing the ridge came down by the valley of Ajlun to the villages of Ain Jenna and Ajlun; all the villages here are built of stone. As we descended, going always north, the cultivation increased—pomegranates, olives, and figs predominating, while close to the village of Ain Jenna stand some noble walnut-trees, the most beautiful trees we had seen in Gilead. A mount of an hour from thence brought us to Kelat Er Rubud, a fine square castle surrounded by a moat, built by Saladin.

The view from the top of the castle is magnificent, finer, as it seemed



to us, than that from Jebel Osha; the air, however, was clearer. We could clearly discern the north end of the Dead Sea, as well as part of the Sea of Galilee, with the whole extent of the Jordan valley, the river gleaming here and there at its windings. In front of us, a little south of west, were Ebal and Gerizim, and directly opposite to us we could distinguish Mount Tabor, with the ridge of Carmel stretching into the far distance, and the wide plain of Esdraelon narrowing into the Wady Farrah, which debouches on the Ghor. Farther north we could see Jebel Safed behind the Sea of Galilee, and far away in the blue haze we were gladdened at last by the sight of the snow-sprinkled peaks of Hermon. It was a glorious panorama, embracing many points of interest, and withal most lovely in itself. We sat long enjoying it. Immediately in front were fine forests of oak, covering the rounded hills that trend down westwards towards the Ghor. Behind us lay the undulating heights of Gilead, the valleys of Kefrenjy and Zerka making wide landmarks.

Leaving Kelat er Rubud at 3 p.m. we scrambled down a very steep and rocky path, and leaving the town of Kefrenjy on our left, crossed the valley, and skirting its left side, wound down to our tents, which we reached at 5.30. The views in our descent were very pretty, and the country open, well wooded, and fertile. A good deal of the land was well cultivated, fig, olive, and carob trees telling of care and attention. Honeysuckle was in blossom, oleanders, and many other plants. Our camp was about half-way between Kelat er Rubud and the Ghor, perhaps 2,000ft. above the latter. Here, however, the tropical vegetation already began, as well as the thorns. Our tents being pitched near a marshy stream, mosquitoes and frogs were the order of the night; moorhens, mud-turtles, and molluscs invited aquatic researches; and an Arab rough made an unsuccessful attempt at burglary and felony, which failed through the vigilance of our guards. This was the solitary case of the kind during our whole trip; so much for the lawlessness of our poor friends the Bedouin.

Friday, April 28.—Made our way down the valley to the Ghor, which we reached in two hours; then had to ride along the bottom for three hours in a southerly direction to reach the ferry, which is nearly opposite Wady Zerka. The heat was great. Wheat is cultivated in small quantities, and we passed two palms and some mounds of ruins. The Ghor is here from eight to ten miles in breadth. The strata on the east side dip generally about here at an angle of 30° north-west, but in some places are nearly horizontal. At one o'clock we reached the ferry, and crossed over to the west side; with regret, for our trip on the east of Jordan was over. We had accomplished it most successfully; our dragoman, Abd-el-Hady, had managed very well for us, and all our own men had worked well and willingly; the Adwan had been most courteous and faithful; we had had lovely weather, and no contretemps or disagreeable incident had arisen to mar our perfect enjoyment. That night we camped in the Wady Farrah, and the next day rode at five o'clock into Nablûs.

A few words in conclusion. To any one who has accomplished it, a visit to the east of Jordan seems essential to the full comprehension of the "land flowing with milk and honey." If not a necessity, yet at least it is an immense help towards the realisation of that expression. The freshness and verdure which still exist in ancient Gilead are an index to the state of the whole country at the time of the conquest by Joshua. Its greater elevation no doubt made it always cooler, and better watered than the country west of Jordan; but the rocks and soil are generally identical, and, indeed, all the physical features. The fine forests about Jebel Osha tell how vigorously timber trees will grow, and the enormous population, evidenced by the remains of the great Roman cities, show that there was no difficulty in supplying nourishment for great numbers of inhabitants. Reuben and Gad were wise in asking for this district, but there were evidently forests and rich lands on "that side Jordan" also. A trip in Gilead is most refreshing after the dreary desolation of the wildernesses of Paran and of Judæa, and affords afterwards a most pleasing recollection of beauty of scenery and verdure hardly discoverable on the west, except at one or two favoured spots, such as Nablus and Carmel. The character of the Adwan, a fine type of Arabs, is well worthy of study; and the examination of the ruins, many of which have never been visited, full of interest. It is gratifying to think that this district will soon be thoroughly explored by the American branch of the Palestine Exploration Fund; but meanwhile every traveller who sees it, though he may not be able to add much or anything to the general knowledge of the country, may still learn something for himself, and will certainly have a most enjoyable trip. Appended is a list of the distances we rode, measured roughly by hours; considering the hills, the rocky paths, and occasional stoppages, three miles an hour will not be, I think, under the mark for a calculation of the mileage.

	h. m.		h. m.
ân to the Ferry at the		Um as Samâk to Jebel Tahîn.....	1
Jordan .....	2	Jebel Tahîn to Ammân .....	1.30
Eastern bank to Nimrîn... ..	2.30	Ammân to Yajûs .....	2
Nimrîn to Sûr .....	2	Yajûs to El Jubwayha.....	1.20
Sûr to Arak el Emir .....	1.30	El Jubwayha to Es Salt .....	3
Arak el Emir to Camp above Wady		Es Salt to Jebel Osha .....	1.15
Keferein .....	2	Jebel Osha to El Beja .....	2
Camp above Wady Keferein to		El Beja to Zerka .....	2.30
Jebel Jabûd .....	0.30	Zerka to Gerash .....	1.20
Jebel Jabûd to Wady Hesbân ...	2	Gerash to Sûf .....	1.30
Wady Hesbân to Jebel Nebba ...	3	Sûf to Kelat er Râbûd.....	2
Jebel Nebba to Town of Hesbân .	1	Kelat er Râbûd to Camp below	
Town of Hesbân to Ain Hesbân .	1.30	Wady Kefrenjy.....	2.30
Ain Hesbân to Um-al-Khanafish .	1	Camp to Ghor .....	2
Um-al-Khanafish to Jebel Naûr... ..	0.40	Along Ghor to Ferry at bottom of	
Jebel Naûr to Um as Samâk .....	1	Wady Farrah .....	3

A. E. N.

RETURNS FROM FOREIGN STATIONS MADE TO THE SCOTTISH METEOROLOGICAL SOCIETY FOR QUARTER ENDING  
JUNE 30, 1871.

STATIONS AND OBSERVERS' NAMES.	Height of Station above the sea.	1871.	BAROMETER.		SELF-REGISTERING THERMO- METERS.						HYGRO- METER.		DEDUCTIONS.		WINDS.											RAIN.						
			Station corrected, and at 32°.	Mean reduced to 32° and Sea-level.	Monthly Range.	Highest in Month.	Lowest in Month.	Monthly Range.	Mean of all the Months.	Daily Range.	Mean Temperature.	Dry Bulb.	Wet Bulb.	Dew-point.	Elastic Force of Vapour.	Humidity, Sat- uration.	Number of Days it blew in certain Directions.								Mean Pressure on square foot.	Number of Days at fell.	Amount.	In. Days 1.30				
																	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.					Calm or Variable.			
BEYROUT, (Syria.) S. JACKSON ELDRIDGE, Esq., Consul-General for Syria.	160	April	22756	29.926	0.350		73.0	57.0	16.0	63.3	63.3	8.0	64.3	65.4	61.6	68.5	4.00	79		2	4	2	0	1	7	8	1	10	1	23	5	1.30
KARAK, (Cisle-Syria.) JOHN SCOTT RATTNAY, Esq., JERUSALEM, (Syria.) THOS. CHAPLIN, Esq., M.D.	(?) 2500	April 1870 Mar.	26594	..	0.280		..	40.0	..	..	48.2	..	..	57.7	50.0	44.1	28.0	61		1	0	1	1	6	14	5	2	0	..	5	0.50	
Note.—On April 8th snow lay one and fourth-fifths of an inch deep where it was not drifted, in many places much deeper—a most unusual occur- rence so late in the season.		April	27399	29.973	0.404		83.8	38.8	45.0	66.3	45.8	20.5	50.0	58.5	50.9	44.1	29.0	59		1	1	2	10	2	5	6	4	0	25	9	3.00	
		April	27389	29.983	0.492		85.0	30.6	54.3	61.6	43.9	17.7	62.8	53.8	48.3	42.9	27.6	67		0	0	4	5	1	6	6	9	0	70	13	3.71	
		May	27411	29.895	0.362		99.0	50.8	48.2	85.6	61.4	24.1	73.4	78.1	69.4	40.3	33.3	33		3	7	5	2	0	1	2	11	0	0.22	0	0.70	
		June	27331	29.816	0.102		98.4	52.5	45.9	83.5	56.7	26.8	70.1	76.7	61.2	50.3	33.5	39		10	4	0	1	0	0	4	11	0	0.30	0	0.00	
		July	27255	29.715	0.180		98.3	53.0	45.2	87.1	59.0	28.1	73.0	79.6	64.8	54.7	42.8	42		3	1	2	0	0	8	16	1	0.28	0	0.00		
		Aug.	27279	29.730	0.240		100.0	57.0	38.1	87.1	64.2	22.9	73.7	80.0	66.0	56.0	45.3	44		3	3	1	2	1	3	4	14	0	0.01	0	0.00	
		Sept.	27401	29.835	0.270		100.0	50.6	49.4	84.1	59.8	24.3	72.0	75.8	63.3	54.4	42.5	43		4	5	0	2	2	7	8	0	0.11	3	2.20		
		Oct.	27447	29.977	0.280		87.5	44.0	43.5	75.6	51.5	24.1	63.6	67.4	59.1	52.5	39.7	59		5	1	2	2	1	3	2	14	0	0.01	4	2.29	
		Nov.	27543	30.003	0.344		82.0	40.8	41.2	70.7	49.3	23.4	60.0	63.6	52.0	42.4	29.8	45		0	4	14	7	0	1	1	3	0	0.12	1	0.10	
		Dec.	27492	30.102	0.326		71.8	37.0	34.8	62.5	42.4	20.1	52.5	55.2	50.0	45.0	23.1	69		1	3	5	4	2	7	4	5	0	0.05	4	1.45	
		1871																														
			Jan.	27481	30.086	0.322		70.1	38.0	32.1	58.5	43.4	15.1	51.0	51.3	46.2	40.9	23.7	68		1	6	4	3	1	4	6	6	0	0.20	9	2.94
		Feb.	27454	30.080	0.450		68.0	30.0	38.0	53.8	38.5	14.8	45.9	47.9	42.4	36.3	21.4	65		1	1	9	2	1	6	5	3	0	0.45	11	4.42	

Reprinted, by permission, from the *Scottish Meteorological Society's Journal*, October, 1871.

## NOTE FROM THE REV. J. NIEL.

A letter from the Rev. J. Niel, incumbent of Christ Church, Jerusalem, says:—"I have been so fortunate as to make some interesting discoveries in Tiberias two weeks ago. It should certainly be thoroughly explored. We found the ruins of the ancient city extending from the castle in the north to about a mile beyond the baths on the south—that is, for about two miles and a quarter, and extending most of the way from the shore to the abrupt hills which rise parallel to it." Mr. Niel has also forwarded copies of certain inscriptions which he has found in Galilee and elsewhere. It will be well for travellers to be careful how they purchase so-called ancient inscriptions, as the "carving of inscriptions in ancient character" has become a new and successful branch of industry in Jerusalem.

---

## NOTE ON THE HAMATH INSCRIPTIONS.

BY HYDE CLARKE.

THE Hamath inscriptions excite great interest, and as they will soon be in the hands of scholars, I think it may be useful to publish the results of a cursory examination. This I do, because while in some quarters it is believed these will prove to be ancient and valuable inscriptions, yet in others they are pronounced by men of high authority not to be inscriptions at all, but vagaries of ornamentation. It is likewise doubtful if, on the supposition that they are inscriptions, the characters are ideographs, syllabics, or letters.

My inspection has been, as stated, a cursory one of the copies in the hands of Captain R. F. Burton, and of the small portions printed by Mr. Wilson in the *Journal of the American Palestine Fund*. The results are consequently open to verification, but they are already sufficient to throw some light on the questions mooted. Thus it appears that the matter consists of recurrent symbols, and that it is presumably composed of characters. I estimated the number of characters at upwards of 500, but they may be found to be more, when the opportunity of careful analysis is obtained.

Of one of these types I found thirty-three examples, of one twenty-one, of two eighteen, and of others the proportions which would appear in an alphabet. Other reasons support this view.

Although there is a figure something like a man with a club and two hands, the bulk of the inscriptions are not ideographs or hieroglyphs, but characters. There appear to be double letters, and possibly ligatures and abbreviations, but so far as can be at present judged the characters are rather alphabetic than syllabic, though some may be found to be so. The hands are found in Himyaritic.

On examining the most frequent characters, I am disposed to assign five as the vowel-aspirates of the old alphabets. Using the most





FACSIMILE OF A PART OF THE HAGIA SOPHIA INSCRIPTION



convenient type symbols for the characters which are not available, these would be represented thus:—

÷	equal to	ⲁ, A, V,	i.e.,	A vowel	Kh	aspirate.
l	„	ⲛ	„	E	H	„
ⲉ	„	ⲓ	„	Oo	Y	„
U	„	ⲓ, U, V, O	„	U	V, F, Ph.	„
O	„	ⲓ, O	„	O	W, Hw	„

ⲉ is probably S.  
 V appears to be D.

Other common forms include ll, llll, 7, l, 3, z, 1, j. These are sufficient to show elements of an alphabet, but many of them conform to the characters of the Himyaritic inscriptions, in which, as translated by Dr. M. Levy, I recognise as identical ⲉ, ⲓ, ⲛ, ⲓ, ⲓ, ⲓ, ⲓ, ⲓ, &c. The mode of writing is different in Hamath. The alphabet is in actual use in Abyssinia.

÷ thus gives us the type of ⲁ. This is not really connected with A, but is another type to be recognised in Aramaic, Italic, Palmyrene, and square Hebrew. ÷ is the analogue of ⲁ. If this be so, the ⲁ of the latter square alphabet has been borrowed from a source more ancient than A in the Phœnician and other alphabets. In Himyaritic l is a bar of division between words and ÷ sometimes assumes the same character.

ⲉ appears as a new type, but is the analogue of the Phœnician, which has a corresponding form as in Greek, ε. It is the most frequent letter, occurring thirty-three times. This letter may also be recognised in Phœnician, Aramaic, Old Hellenic, Italic, and Palmyrene. It appears to possess a double form, one less frequent, in which a dot appears on each side of the bar.

U needs little comment; it occurs eighteen times. Its value is 100.

O occurs about ten times. Its value is perhaps 1,000.

The Hamath inscriptions confirm my former opinion that the alphabet as named by the Hebrews is not in its right order, and that the names are not the original names having the significations usually attributed to them, but are representatives of the ancient names, adopted to avoid idolatrous references. All the alphabets of the Hamath class are chiefly founded on the intersections of two crosses, still used by Rabbis, &c., as a secret alphabet.

The words or phrases appear to be read from top to bottom, and may then possibly return, as in boustrophedon and in Himyaritic.

The remains on comparison suggest that there are at least two inscriptions differing in character.

The inscriptions are of such antiquity that if on transliteration they do not conform to a Semitic rendering, I would suggest they should be tried for Georgian, the nearest representative of the Caucaso-Tibetan languages spoken in the region before the Semitic.





## THE PALESTINE EXPLORATION FUND.

---

### THE SURVEY.

The following are extracts from letters received during the past quarter from Mr. C. F. Tyrwhitt Drake. They contain much which will be read with great interest by the subscribers:—

#### I.

YAZUR, NEAR JAFFA, *April 15, 1872.*

On the 3rd inst. we pitched our camp here, as I was anxious to fill in this piece of country before the hot weather came on, deeming it most unadvisable to expose men new to the climate to the great heat of the maritime plain in summer. Even at this early season we have had some warm days, on which the thermometer has been above 80° F. in the shade. There is yet another reason for avoiding the plain in summer, namely, the impossibility of distinguishing small objects, such as poles, cairns, &c., at a distance of six or seven miles, owing to the mirage, which makes a hill-top observed through the glass undulate like the sea during a heavy ground-swell, or rather, waves of semi-opaque air seem interposed between the observer and the distant point. As this has already proved a considerable hindrance to us, I intend to move up into the mountains for the rest of the summer as soon as the immediate neighbourhood is finished. In this light stoneless soil it was a matter of some difficulty to put up suitable objects to observe to; we have found a pole, firmly stuck in the ground and swathed with bundles of dry grass or small bushes, to answer the purpose very well.

Owing to the constantly recurring annoyances to which we were subjected by the fellaheen, I have judged it advisable to attach a *kheyal* (one of the irregular horse supplied by Government) permanently to the camp, as it stamps the expedition with Government authority, and keeps the natives in check. As the fellaheen are men who will hold up their right hands and swear by God and the prophet, by my life and by their own, that they love me better than their fathers or their brothers, that they are my slaves, &c., &c., and at the same time will filch with their left hands, it is as well to have some little show of authority.

Most tourists who pass through Jaffa doubtless know that a German colony flourishes there, and many may have seen the Jewish Agricul-

tural School, situated some two and a half miles S.E. of the town on the Jerusalem road. Few, in all likelihood, will have had time or opportunity to learn more than some main facts regarding them. I have therefore collected information which will, I think, prove generally interesting. This being derived from all sources, frequently contained the most decided contradictions, as each native interested in the matter gave his own colouring to it, and the truth could only be found by carefully sifting the evidence. I must take this opportunity of thanking M. Netter for the great courtesy and openness with which he supplied me with information on the subject.

The "Mikveh Israel," as the Agricultural Institution of the Universal Israelitish Alliance has been named, covers 2,600 dillem (1 dillem = 1,600 square pics; 1 pic = 0.76 metres), or 316 hectares, which equal 781 acres, and of this one-third has been newly brought under the plough. This land is to be held free for ten years, and after that to pay a quit-rent of £70 Turkish, or £68 sterling. Before the land was granted by the Sultan for the purpose of founding an agricultural school, it was cultivated by the villagers of Yazúr, and though the land belongs to Government, the fellaheen, from long usage, have got to look upon it as virtually their own, and resent its occupation by any other person. In this case the men of Yazúr—a village with a mixed population well meriting the bad reputation it enjoys—were particularly enraged, as it had for a long time been their custom to plant gardens on the extreme edge of the land they cultivated, and then sell them to the people of Jaffa, in this way disposing of crown land for their own benefit. Thus cut off, by the interpolation of the Jewish colony, from a source of large revenue, they naturally became bitter opponents of the Agricultural School, which at this moment, however, employs from 80 to 100 fellaheen, who are chiefly from Yazúr, a small number being from Sélaméh, Beit Dejjan, and the neighbouring villages. A larger proportion of Yazúr men was formerly employed, but they were found so dishonest that it was necessary to discharge them.

After some delay 1,600 dillem were allotted to the village of Yazúr from the Beit Dejjan territory, which is very large, as compensation for what had been taken away on the other side. Still the fellaheen complain that they were not paid for land which they own to be Government property! I can only say that it would be a most excellent thing if the Government set aside its dislike to selling land to foreigners. With proper guarantees a large proportion of this country would find a ready market, and then the present fellah would be either eliminated or converted into a useful member of society, while the increase of revenue to the Turkish Government would be very considerable.

The men of Yazúr vow that they are completely ruined, but they were still able, some three months ago, to offer 65,000 piastres (£520 sterling) for 4,000 dillem of land which the Government wished to dispose of to the south of their village. One party, led by the Mukhtar (Headman) Mahmúd, is a violent opponent to the institution, but a large

section of the villagers who work on the estate, and receive from three and a half to five piastres (75 cents to 1 franc) per diem, are content with the arrangement.

The object of the Agricultural School is to train up children to a useful and industrious course of life; to teach them market-gardening rather than farming, as the former is always a profitable pursuit in the neighbourhood of towns, and the latter, owing to restrictions imposed by the Turkish Government, and jealousy of the fellahen, is very precarious. A practical knowledge of land-measuring will also be taught, and will doubtless obtain Government employment for some of the pupils; native surveyors being generally incompetent and always open to a *douceur*, both of which qualities are found to have their disadvantages.

The school has been opened since July, 1870, and now has twelve pupils (viz., one accountant, three shoemakers, one farrier, four gardeners, two carpenters, and one agriculturist), but it is hoped that sufficient buildings will be ready to receive twenty-eight more at the end of the summer. At present all the pupils are Jews, but, according to the agreement with the Sultan, both Christians and Moslems are to be admitted on payment. One primary difficulty now being overcome is the establishment of a common language, without which it would be impossible to enter upon any course of instruction, as some spoke Spanish, others German, Polish, or Russian. French is the language adopted, and with success. It is hoped, when funds permit, to increase the number of pupils to one hundred, and to establish a school for the same number of girls. It is proposed to cultivate fruits and vegetables of many kinds, which will doubtless find a ready market at Jaffa, especially during the tourist season; at Port Said, where the rapidly increasing number of vessels passing through the Suez Canal will ensure a constant demand; at Jerusalem, where there is a large resident European body of consuls, clergy, &c., and, to some extent, at Beyrout. Twelve steamers belonging to three companies touch monthly at Jaffa, and might be looked to not only as a means of transport, but as consumers.

Trees are to be cultivated, and M. Netter tells me that the nursery already contains more than 100,000 plants of different kinds, and that half a million of vines are also planted. As the land borders on the sandhills, which are rapidly advancing in a north-east direction, it is proposed to plant a belt of *pinus maritima* along the edge of the dunes. In some places, already covered with sand, it is found to be no more than one metre in depth; in time it is intended to clear this away. The rate at which the sandhills advance is, of course, very difficult to determine, but it seems to be about two to three yards per annum, judging by the rate at which it is overwhelming a garden to the south of this village computed by a comparison of several independent testimonies. At the Jewish colony, however, the rate would not be nearly so great.

It is also proposed to cultivate flowers for making scents, to make

olive oil and soap, and to tan the skins, which are exported raw at a low price and brought back again as costly leather.

By these means it is hoped not only to make the Agricultural Institute a means of bettering the condition of the Palestine Jews, but also a successful mercantile operation. Whether the latter comes to pass or not, the former consideration is enough to recommend it to the attention of those Jews in Europe who are really anxious to improve the degraded state of their co-religionists in Palestine.

The German colony at Jaffa next deserves our attention. As it is the result of a religious movement, a few words of preface are necessary to explain the reason of its existence there.

Some fifty years ago a society was formed by Dr. J. A. Bengel, the well-known author of the *Gnomon of the New Testament*, at Kornthal, Würtemberg, in expectation of being called in some direct manner to the Holy Land. After a time this body dissolved itself, and the present society, called "The Temple," was founded, or rather revived, on the principles of the former, by Herr Christopher Hoffman, son of one of Dr. Bengel's co-operators. He was presently joined by Herr G. D. Hardegg, who is president of the Haifa, as Herr Hoffman is of the Jaffa colony. The society has members in Russia and America, but chiefly in Germany. It is called "The Temple" from the belief of its members that they are fulfilling Scripture by founding a spiritual temple in Palestine. Their doctrines are set out at length in several publications printed at Stuttgart and elsewhere in Germany and America. Land is bought as occasion serves by the committee in Palestine, and allotted at cost price to members enrolled in Europe. As yet Haifa and Jaffa are the only places where land has been bought. There are, however, some fifty members of the society at Jerusalem, twenty-five at Beyrout, and a few at Alexandria; these are all either domestic servants or artisans.

The Haifa colony was founded in October, 1868, and now numbers some 300 souls. Twenty-four stone houses have already been built there. A grant of between five and six thousand acres has also been promised them by the Turkish Government on Mount Carmel. On this it is intended to build a town and cultivate the soil, devoting especial attention to vine-growing. In this colony there are five families of American citizens, German by birth.

The Jaffa colony was founded six months later, and began by gradually buying from private individuals the houses built by the American colony which had been tried there and failed. Eight of these houses were so bought, and afterwards five others in or near Jaffa. Ten others are either built or in course of construction at Saron, some two and a half miles N.E. of the town.

There are about 100 men, 70 women, and 35 children in the colony. (The total number of members in Germany amounts to about 5,000 souls.) The trades are distributed as follows:—2 doctors, 1 engineer, 1 hotelkeeper, 1 watchmaker, 2 joiners, 2 carpenters, 2 masons, 2 shoe-

makers, 2 merchants, 2 blacksmiths, 1 painter, 1 miller, 1 saddler, 1 butcher, 1 baker, 1 gardener, 1 chemist, and 1 locksmith, the rest being mostly farmers.

Some native labourers are employed, chiefly as masons, but a few as artisans and farming men; their wages range from five and a half for ordinary up to twenty piastres a day for skilled labour. The land they have bought contains about 400 acres of arable and two gardens. The former produces wheat, barley, sesame, and potatoes, for home consumption; the latter give vegetables, oranges, peaches, apricots, &c. The colony is self-supporting, but some of the missionary work is aided by contributions from their brethren in Europe and America. The ordinary taxes of *'ashr* (tithe), poll-tax on sheep and cattle, and *ad valorem* on gardens, are paid to the Government as by natives.

At both Jaffa and Haifa there is a school for boys and also for girls. The former are taught Arabic by a native teacher, as well as German, English, French, and mathematics, and in the higher classes Greek, Latin, and drawing. Herr Hoffman is the elder of the society, there being no regular clergy, and meetings for prayer and to discuss the welfare of the society are held in the school. Baptism and communion are optional. The civil register of marriages is kept at the German consulate. Any Christian giving his adhesion to the rules and regulations of the society is allowed to join with them, whether his peculiar tenets would cause him to be classed as Greek or Armenian, Protestant or Roman Catholic.

The climate is found to be healthy, slight fevers being the most common complaint, especially near the town gardens. The new colony at Sarona will probably prove more healthy, being built on a ridge of sandstone, away from vegetation, and exposed to the sea breezes.

The colonists being hardworking, honest men, are well spoken of by the natives, with whom they are on a friendly footing, though, luckily for themselves, they are virtually independent. These two colonies, Semitic and Germanic, though distinct in their aims and working, cannot, I think, fail to have, so far as it extends—for, considering the people whom it is likely to influence, I am not disposed to rate it too highly—a salutary influence in pointing out the advantages arising from careful industry. With all his evil qualities the fellah is not altogether incapable of adopting improvements, especially if likely to produce piastres. If, then, these colonies be encouraged and extended, one may reasonably hope for some slight improvement of the native population in their immediate neighbourhood.

---



## II.

## CAMP AT KHIRBETHA IBN HARITH, April 28, 1870.

The picture I am going to draw of peasant character in Palestine is not a bright one, and has but few touches of light to relieve its sombreness.

"Eastern life" has become with us in Europe almost synonymous with a life of romance, poetry, houris, and flowers, of gorgeous raiment and matchless steeds, of jewels and luxury. What can be more romantic—in print—than the tameless son of the desert, free as air, chivalrous as Bayard, mounted on his priceless mare returning from a successful onslaught on his foes, to lay the spoils of shawls from Khorassan and Kashmir, silks from Damascus, and gold filigree work from Cairo, at the feet of the dark-browed maiden whose gazelle-like eyes have caused more havoc in the desert than ever did the arrows of Abu Zayd the invincible? Are not the pearls of the harem said to be peerless in beauty and grace, and their wondrous loveliness to overpower the senses like the air heavy with scent of orange flowers and jessamine beneath their own sunny sky? Have not the "Arabian Nights" taught us that rubies as big as pigeons' eggs, and pearls the size of raspberries, are common, while gold is dross to be scattered broadcast to gaping crowds by the princes of Islam? Alas! that truth with one stroke of a realistic pen should destroy this dream of poetry. Let us see the Bedawin as he is. Living under hair-tents, in squalor, filth, and ignorance, his chivalry degenerates into simple freebooting, his priceless mare is—*exceptis excipiendis*—a scraggy, thin-chested, drooping-flanked beast, capable by some peculiar provision of nature unknown to the horse of civilisation, of going long wearisome journeys with little water and less food; her pace, however, is little more than three miles and a half per hour, and if pressed she soon fails. The Bedawin's dark-eyed love is perhaps not ugly at twelve years old, but at twenty she is perfectly hideous and looks forty. From earliest girlhood she is brought up as a hewer of wood and drawer of water. For the first seven or eight years of their lives, all the children play about the ragged tents in happy community of ideas with the kids and lambs, puppies, chickens, calves, and camelets. After that they tend the flocks; at ten or twelve the girls marry, and the boys, so soon as they are grown up, leave all toil to the women and children as unworthy of their manly dignity. A successful foray raises them in the social scale, as a grand *coup* on the Bourse or Stock Exchange does in more civilised lands. Though wealth be power everywhere, it is nowhere more potent than in the East, where competitive examinations and compulsory education are equally unknown. Still a good word may be said for the Bedawin in districts where contact with Europeans has not spoilt them. They are then hospitable after their fashion, always offering a meal to the passing traveller, and though they will do their best to overreach and

cheat in making a bargain, yet once the affair settled and their word given, a breach of faith is seldom, I may even say never, known.

As to the veiled beauties of the harem, we must trust to the perhaps somewhat *ex parte* descriptions of European ladies, and such stray glimpses as chance may show. Neither of them carry out the ideas of loveliness implanted by the "Arabian Nights," and one who has lived in the native quarters of Eastern towns will be well aware that the fair sex is cursed with a most vile shrewish tongue, and makes use of undiluted Billingsgate on the slightest provocation, in tones which force themselves to be heard by all the neighbours.

But to turn to the fellaheen. From earliest infancy they are brought up in utter ignorance; they are never children, the merry laughter and sports of European childhood are here quite unknown. At three years old they are little men and women with wonderful *aplomb*. Tiny dots scarcely able to toddle may be seen gathering *khobbayzeh* (wild mallows) for the evening meal, and when they have filled the skirts of their one wee garment, will trot home as sedately as though the cares of life were already pressing heavily on their shoulders. I have seldom in this country heard a genuine laugh from man, woman, or child; the great struggle for existence seems to have crushed all but fictitious mirth.

The fellaheen boys—very rarely the girls—take charge of the flocks and herds till they are old enough to consider themselves men; thus exposed to all weathers they are as hardy as their charge, but if attacked by sickness one is as little cared for as the other, and chronic coughs, fevers, rheumatism, and ophthalmia, are the consequent results.

The physical and mental degradation of the women, who are mere animals, *proletarie*, beasts of burden, cannot but have a most injurious effect upon the children. The foul language in common use by men, women, and children, but especially the latter, is startling.

A father's pride in his children is little better than that of the beasts for their offspring; he has no care for their improvement in any way, and consequently they grow up utter savages, never corrected for faults nor praised for doing well—often the reverse—and ignorant to the last degree. Besides this, the children are spoilt, and have their own way completely; if thwarted they abuse their parents and elders, who merely return the abuse with interest. More than once I have had a sick child brought for me to doctor, but on the brat's objecting to have eye-lotion administered, or even to be closely looked at, the fond parent would remark, "Don't um like medicine, then, um shan't have it then," and sent the little wretch away, looking upon me with horror and indignation for suggesting a slight correction.

Privacy is absolutely unknown. Anybody's business is everybody's business. If any transaction, private quarrel, or discussion, be going on, every one present puts in his or her word. Hence in villages where there are two factions, brawls ending in bloodshed have not unfrequently arisen out of petty disputes between women and children. For private

talk it is common to see two or three men seated under a tree in an orchard or olive grove, where there is no possibility of being overheard.

The fellaheen are all in all the worst type of humanity that I have come across in the East. The 'Ammarin and Lyathineh of Petra are perhaps greater ruffians, being beyond the reach of troops, but they are known to be lawless plunderers, and the traveller expects the worst from them. The fellah is totally destitute of all moral sense; he changes his pledged word as easily as he slips off his *abba*; robbery, even when accompanied by violence and murder, is quite in his line, *provided* he can do it with little fear of detection. To one who has power he is fawning and cringing to a disgusting extent, but to one whom he does not fear, or who does not understand Arabic, his insolence and ribald abuse are unbounded. As an instance, I may quote the fact that when we were taking observations from Beit 'ur el Foka, the men were servile and deferential before me, but a few days later one of the non-commissioned officers and a native servant rode past the place, and were abused in most scurrilous language by the children, who were edged on to it by their elders.

I am well aware that this slight though far from hasty sketch will seem overcoloured to many whose acquaintance with the country is but that of a holiday tourist; but a more intimate contact with the people and knowledge of their language would soon modify any favourable ideas based upon their picturesque vagabondism, and the transient skin-deep civility produced by a backshish. The fellaheen themselves have often said to me, with that implied exception in their own favour so characteristic of the semi-savage, "All the fellaheen are liars, poor men always are; we know that the Franks always speak the truth, but our people never do." The Syrian proverb, "Lying is the salt of a man," is characteristic.

Naturally the fellah is not wanting in intelligence; the boys, in the towns, show considerable aptitude for learning till they reach the age of thirteen or fourteen, after which they advance no further. The very early marriages doubtless conduce to this. Still, under a well-regulated system of education, what natural good points they possess would be fostered and encouraged, and in two or three generations the people might be developed into something useful. There is no class corresponding with our landed gentry or large farmers to whom they can look for assistance, and to whose interest it is to help them. Thus till some radical change be effected, little, if any, amelioration in their condition can be looked for.

The other day I was witness to a characteristic little scene. Some four or five soldiers were at the village of Dayr Kadis collecting the poll-tax on goats. One man either could not or would not pay, so the soldiers began to tie his hands together, preparatory to taking him off to prison. While they were thus engaged one of the bystanders rushed in and dealt the prisoner several shrewd knocks on the head

with a heavy stick, abusing him loudly meanwhile, and urged the soldiers to beat him, to which one of them complied by prodding him with the heavily ironed butt end of his lance. I asked the reason of this fellah's behaviour to his fellow-villager from some men who were looking on in a most nonchalant way. "Oh," they replied, "that's his brother, who beats him to make the soldiers believe that he has no share in refusing to pay the tax." It struck me as a curious way of showing brotherly affection.

The houses of the fellaheen are generally miserable huts, dark, dirty, and comfortless; in the mountains they are built of stone, or mud and stone combined, and generally roofed with bits of rough timber on which bushes and a couple of feet of soil are laid. These roofs require careful rolling at the beginning of the rains; if this is not done the water sinks in and causes them to collapse. Inside the house there is no furniture beyond a few rush mats, or if the man be well off, a carpet and some *lehafs* (cotton quilts). A very limited number of pots, pans, and jars serve for cooking. They seldom eat meat except at the 'Ayd el Kebir (great feast), or when an animal has to be killed to prevent its dying a natural death. The bread is generally made of millet or barley, rarely of wheat; this, with milk in the forms of *leben* (sour milk), *semm* (clarified butter), and cheese, and eggs, form the chief part of their food. In the poorer districts wild mallows (*khob-bayzeh*) and other herbs form an important item.

### III.

'AIN SINIA, May 18, 1872.

Being lately in Jerusalem for a few days, I took advantage of an offer of Dr. Chaplin to go with him and examine what seemed to be the remains of two Christian churches in the present Jewish quarter of that town. It appears probable that the Jews were once located near the Bab Hatta, *i.e.*, north-west of the church of St. Anne, for several of them own houses there, and have lately taken to live in them.

The first house we visited is near one of the Sephardim synagogues, and belongs to a Jew from Fas in Morocco. In an upper room, divided into two by a wooden platform—as is the common custom here amongst the Jews, who are fearfully overcrowded—we found two semicircular recesses, evidently apses, now used as cupboards. They faced due east, and measured across about seven and a half and five feet respectively. In some of the lower parts of the house are traces of an older masonry, upon and into which the present dwelling has been fitted.

The second house visited stands in the Maydan, about west-south-west of Robinson's Arch on the brow of the hill. The substructions consist of long vaults with slightly pointed roofs of rubble grouted in. Above these seems to have been a large chamber, the vaults springing

from corbels like the enclosed sketch : of these, one is pretty perfect, and another is half-concealed under plaster beside the entrance door, on the lintel of which is a roughly cut inscription, seemingly in Latin; it has been carefully obliterated, and nothing can now be made out but 8. NOV. at the end. In the basement of the house are several pieces of masonry which, judging from the dressing of the stones, are of Crusading date. In the house to the north of this is a doorway, with circular arch and plain mouldings. This is now blocked up, and not at all visible from the north side, which is in a house occupied by a Moslem. A stone coffin is said to be buried at the door of the Jew's house in which this arch is to be seen. Here, too, is a well of brackish water, similar in taste to that of Siloam, and 33 feet deep, which the owners declare to be a never-failing spring. In the house next below, the water comes from a cistern, and is pure and sweet. The Jews have a tradition, which is doubtless true, that both the places I have mentioned above were convents.

The mosque belonging to the Mowlevi Darwishes, which stands a little east of the entrance to the Royal caverns, must also have been a Christian church. I presume that the plan of this has been already made; if not, I will forward it to you on the first opportunity.

There are also some very interesting arches running north and south through the back of the shops on the east side of the principal Jewish street. These arches are round and built of very large stones, with little, if any, cement; the style of masonry appears exactly similar to that used in the fine Christian church at Amwas. Should these not yet have been described, I will examine them with greater care on my next visit to Jerusalem.

The country that we are now in abounds in olives, figs, and vines, to an extent that the ordinary traveller passing along the beaten tracks has no idea of. The valleys are almost precipitous, but terraced from top to bottom; low walls are built on the edges of the steps formed by the strata, to prevent the earth being washed down. These terraces are called by the natives *Ahhâl* or Ropes, and render cross-country work always difficult, and in many cases impossible. Corn, barley, and lentils are here grown, as well as *Kursenni*, which may be called horse-lentils, being only used to feed cattle.

Between this place and our last camp—Khirbeth ibn Hâritu—I noticed that a considerable tract of the hills is thickly sprinkled with gnarled and stunted specimens of a species of pine called in Arabic *Sinobar*. This tree seems formerly to have extended south of Jerusalem, but two or three isolated examples close to the town are now all that remain. In the Lebanon it grows to upwards of 30ft. in height, especially on the out-crops of sandstone which occur east of Beyrout. A species of hawthorn, too, is found here, which I first noticed in North Syria and the district of Aleppo, bearing a fruit the size of a large morella cherry, and of a rather pleasant subacid flavour. It is both eaten raw and made into preserves and pickles.



My time has lately been so fully occupied with out-of-door work that I have found but little leisure to study topographical questions; but the list of towns assigned to the tribe of Ephraim, in whose territory we now are, being lost, few identifications can be looked for except maybe of certain places incidentally mentioned. Several of the names are highly suggestive of old Hebrew ones, but as Dr. Robinson most justly observes, we must expect to find many names repeated, as is the case in the modern nomenclature not only here but also in Europe.

There is a crusading fort about a mile from this place, called Burj Bardawil, "Baldwin's Tower," evidently built to command the road between Jerusalem and Nablus. The construction is strong, but rude and inartistic. I shall send you a plan as soon as it is made. Some four years ago a small civil war occurred between half Yabrud, half Selwad, half 'Ain Abrúd, and 'Ain Sinia, against the other halve of the three first-named villages. This fort was occupied by each party in turn, and about 110 men were killed. The *finale* was as usual, the Government came down and conscripted many of the survivors, imposed heavy fines, and half-ruined the people, since which time they have been outwardly quiet and well-behaved, with the exception of a few cases of murder and robbery.

---

#### IV.

'AIN SINIA, May 27, 1872.

Excavated tombs are to be found throughout the whole of Palestine. In many cases they are scattered singly about the hills, as though some individuals preferred having their tombs in their own vineyards (e.g., Nicodemus's tomb in his garden). In other places they form a regular cemetery. Over one of the tombs in this neighbourhood I found a Hebrew inscription, which is plainly legible, but having been cut on a very rough surface, I found it impossible to take a good squeeze of it.

The interior of the cave is unfinished, and on the north side is a rude kind of alcove or *mastabah*, on which a body was laid. This tomb had been entered by the fellaheen some time ago in hopes of finding treasure, but they were rewarded by nothing but a few osteophagi, which they broke up. I enclose a sketch showing the chief characteristics of these, which are of a harder stone than those found near Jerusalem. I also met with fragments of very thin, hard glass, broken pottery—originally large jars, with ribs running round at regular intervals—and one small long-necked jar (broken) of good red ware. The bones were in a very decayed state. I succeeded, however, in securing some fragments of skulls sufficiently typical. In the centre of the cave lay a skeleton in good preservation, but from its position comparatively modern. In the skull I found three olive stones. Now at Palmyra Captain Burton found peach, apricot, and olive stones in the skulls of mummies, and at Shakka in the Jebel el Druze, Haurán, we found an almond with the

top cut off diagonally in one of the mummy skulls from the Tower of Bassus. It is very puzzling to find this superstitious observance—whatever its import may be—adhered to in the case of a burial which to all appearance cannot well be earlier than the thirteenth or fourteenth century. In this case, however, it has occurred to me as possible, though not probable, that the olive stones in question were carried there by mice, and left by them after they had eaten the berry.

I opened another tomb close by the above-mentioned, and though to all appearance it had not been recently disturbed, it proved to have been pillaged. I found nothing in it but bones much decayed, and fragments of glass and pottery similar to those in the other cave. Near the door (which in both cases was the usual block of stone fitting into the square entrance) I found an ivory comb, fragments of charcoal, and part of the bottom of a glass, with either cut or moulded faces; owing to the oxydisation it is impossible to say which.

The crusaders must have had quite a colony in this district. Burj Bardawil (Baldwin's Tower), a little north of Yabrud, commands the junction of several wadies, and the highway from Jerusalem to Náblus. Near this village is a ruin called Khirbet Satti, which tradition makes the stables of the above-mentioned fort. At Jifneh, near the modern Latin monastery, there is a ruined tower, and traces of other buildings which must be ascribed to the same period. At Arnútieh, too, they seem to have had a fort commanding the Náblus highway and the old Roman road leading to Antipatris, *viâ* Tibneh. This colony would have been connected with Jerusalem by the important posts of Beitin (Bethel), Bireh (Beeroth), and Nebi Samwíl.

The ruined khans at Miskah and El Burayj in the wady between Beit 'Anan and Beit Nuba, must be referred to the same date.

I have noticed one prevailing characteristic in all these, viz., the use of drafted stones, sometimes with two bosses, at the corners of the buildings, and nowhere else. Vaults with very slightly pointed arches are extensively used, and are solidly built with rough stones, and a large quantity of good cement. The faces of the ashlar being left rough, no masons' marks have been found as on the smooth-dressed stones at Nebi Samwíl, Kawkat el Hawa (Belvoir), &c.

The piece of difficult country near this place, in the middle of which is the spring aptly enough termed 'Ain el Haramíyeh, the Thieves' Fountain, seems always to have been regarded as the key of the road between Jerusalem and Náblus, for on the hill opposite to Burj Bardawil, and east of 'Ain el Haramíyeh, I found the ruins of an important fort, Burj el Lisáneh (the Tower of the Tongue, probably so called from the spur which it occupies). The situation is most commanding, being, with the exception of Tell 'Asúr, which rises to some 3,100ft., the most elevated hill-top in this region. The ascent is by a difficult goat track from near Selwad, or the round-about road from Mezra'a el Sherkiyeh. From the north and west it is almost inaccessible, there being about halfway down the hill one of those precipices of smooth

rock, some 20ft. to 30ft. high, which are so common in this neighbourhood. The summit is nearly circular, and on it are many ruined walls built with massive cubes of rough-hewn stones, a few well-dressed drafted examples of considerable size being found at intervals. I remarked many unusually large excavated cisterns, but of the common bell shape. In the centre of the ruins is an oblong building, some 40ft. by 20ft. It was originally covered in by a round arched vault of masonry. The doorway, which is at the east-north-east end, is composed of large carefully-dressed drafted stones. The entrance is only about 5ft. by 3ft., and inside are three sockets for bars, and a circular hole above either to receive an upright bar, which would prevent the door from being fully opened, or to attack the besiegers through in case the door was forced.

Though the building has all the appearance of Roman work, it still seems to have been built of old materials, as in one or two places I noticed stones with rustic bosses, the rest being rough-dressed. Some fifty yards to the north-west I found six prostrate limestone columns, 7ft. 6in. high, and 1ft. 6in. in diameter, the only ornamentation being a double fillet at top and bottom, but broader at the latter. Though the stones have mostly been cleared away to make room for vines, still two or three pedestals remained *in situ*, and I could trace the general plan of the building, which ran nearly north and south. It must have consisted of three rows of arches supported at the sides by pilasters, and down the centre by two rows of three or more columns, as I observed a similar pillar at a little distance.

The present Christian population at Jifneh, Bîr el Zeit, 'Abûd, 'Ain-'Arik, Ram Allah, Jania, and Tayibeh, is probably due to the fact of a strong crusading centre having existed in their midst. Most of these Christians are Greek orthodox, but in places, as at Ram Allah, Jifneh, and Bîr el Zeit, where the Latins have established monasteries and churches, about one-fourth to one-third of the population adopt their ritual, purely as a matter of policy, for of dogmas or tenets they are quite unconscious.

The Christian party in Palestine is so small that, as they have often told me themselves, without the helping hand of consuls and convents they would be pushed to the wall.

I have no intention of here discussing the general effect of European missionary influence, whether lay or ecclesiastical, in Palestine; but I may mention one fact which militates strongly against the spread of Protestantism, and which seems to have been universally overlooked or ignored. I refer to the necessity of native clergy, or at all events of an Arabic-speaking ordained minister, in every place where it is intended to establish a Protestant community. A Bible-reader may be a most excellent individual, but that he should conduct a religious service is not at all agreeable to the ideas of Oriental Christians. A native priest, it is true, can seldom boast of much more learning than his flock, except that he can probably read and write a little, but still he is looked up to

as an ordained minister, and assumes a position which no layman can ever occupy. Till each community of Protestants has its own ordained minister, little progress will be made except in the matter of schools, by which, after all, more real and lasting benefit is conferred on the people, if the teaching be adapted to their requirements, than can be secured by any amount of adult diverts. In any case little visible advancement can scarcely be hoped for in less than two or three generations, so great and radical is the change which must be brought about. At a future period I hope to give a full account of the social, political, and religious aspects of this country in the year of grace 1872, which, however, would be out of place in these sketches of our survey.

These South Palestine Christians have, on the whole, though turbulent and unquiet, left a better impression on my mind than their North-country brethren. They seem more courageous, and probably their willingness to defend themselves prevented the Syrian massacre from extending into the South, for numerically they are but a handful in the centre of a lawless Moslem population.

A petulancy of temper shown by one of these gentlemen of Ram Allah, some two months ago, in pointing a pistol at Corporal Armstrong, who had expressed a decided objection to having a ruler and other articles taken out of his pocket, must be looked upon merely as a fretful dumb-show declaration of the universal idea in this land that might is right. On seeing that might (in the shape of myself and a Zabtíyeh) belonged to the other side, the fellah at once apologised by exclaiming that he was a Christian, and bolting precipitately down the terraces of a steep hill-side, whence he was not recovered till I had raised a hue and cry in his village and chased him for some distance over the vineyards. In the evening, acting purely on his old principle about *le droit de force*, he and all his friends came over to our camp at El Jib to beg pardon, and readily, but with a somewhat wry face, agreed to pay a small fine to the Protestant school in their village. This was, I well knew, a refined punishment, for a fellah would as soon have a tooth drawn as pay a dollar, but the length of the fang is doubled when it has to be paid to one of another sect.

With regard to identification of sites I may say that there is a village (Bet'ain) two and a quarter miles north-west of Nether Beth-horon, and three and three-quarters from the Upper. This may perhaps be that Baalath which is twice mentioned in that neighbourhood, viz., 1 Kings ix. 18 and 2 Chron. viii. 6.

In Joshua xxi. 22 Kibzaim is mentioned also in connection with Beth-horon: the modern Deir Ibzíyeh, which is two and a quarter miles north of Beit 'Ur el Foka, may perhaps represent it. The location, however, of these obscure places can never be more than conjectural.

I have lately come across a book on Palestine ("Das heilige Land," &c., by Rabbi Schwartz, Frankfort-on-the-Maine, S. Kaufmann, 1852) by a Jerusalem rabbi, which is somewhat valuable as giving the geography from a Hebrew point of view, with many Talmudic and rabbinical references. One rendering is quite new to me, and as I am

not at this moment prepared to criticise it, I give it in his own words: "Atroth Beth Joab עֲטְרוֹת בֵּית יוֹאָב" (1 Chron. ii. 54, A.V., Ataroth the house of Joab) ". . . now the village Al Etron, which is vulgarly corrupted into Latrún. This is Atroth: a quarter of an hour to the north lies Beth Joab, *i.e.* Deir Ayyab." This rendering is ingenious, but I am not disposed to lean too much on the learned rabbi's authority on finding that he identifies the Upper Beth-horon with Huwára (the chalky), a village at the south-east corner of the Jebel Náblus block. Again, we find the Hebrew Ataroth preserved in the name 'Atára, north-west of this place, and, as I have before remarked, the fellaheen always speak of Latrun as *Ratlín*, which is also opposed to the rabbi's argument.

P. S. KUZAH, *June 5th*, 1872.

On the 29th ult. we moved our camp to this place. It is a small village lying about two hours south of Náblus. For the first time we are badly off for water, for with the exception of one or two cisterns, replete with animalculæ, the only supply is from 'Ain Kúzah, a well about a mile distant, and upon which the towns of Huwára and Bayta depend, as well as this village, and at times 'Ain 'Abús. The country is not quite so bad to travel over as that we have just quitted, but still

"These high wild hills and rough uneven ways,  
Draw out our miles and make them wearisome."

The summer, too, has now fairly set in, and we may look for a cloudless sky during the next five months. On the hills, however, we generally get a cool sea breeze after 10 a.m., unless it happens to blow from the southwards, then it becomes a *khammasín*, or sirocco. The alternations of temperature by day and night are still great. During the day of the 29th ult. the thermometer stood at a little over 96° in the Observatory, and on the same night was 54° in the same place; this, however, is exceptionally great; 75° and 55° would be much nearer the general average, though yesterday, on coming back to camp at 2.30 p.m., I found the dry bulb 96°, wet bulb 67°, in the Observatory, and the black bulb in vacuo 165° in the sun. To-day at 12.30 they were respectively 100°·5, 66°·2, and 165°, while the minimum ground thermometer, which had been left in the sun unsuspecting of harm, was found to have burst. This heat justifies the pithy though somewhat vulgar expression a fellah used to me, "A gate of hell is open to-day."

C. F. TYRWHITT DRAKE.

The following report of the progress of the Survey has also been received by the Committee, through Mr. Drake:—

CAMP, YAZUR, *17th April*, 1872.

SIR,—During February and March 100 square miles of country were triangulated and detail filled in, which, with that already returned in January, makes a total of 180 square miles.

The detail filled in during the last two months was close—more especially that done in March.



With a trifling exception the whole has been drawn on the fair plan, but it has not been hill-shaded. A complete connection has now been established between Jaffa and Jerusalem, many trigonometrical observations having been made to the principal objects in the latter, so that the 1-2500 scale plan formerly made can be reduced at any convenient time and inserted in its relative position on the one-inch map.

Connections with Captain Wilson's bench marks, on the line of leveling from the Mediterranean to the Dead Sea, have been made in three instances with trigonometrical stations.

I am, Sir, your obedient servant,

THOMAS BLACK, Sergeant R.E.

C. F. T. DRAKE, Esq.

NOTE.—About 40 square miles have been already filled in this month.

## ON THE METEOROLOGICAL OBSERVATIONS TAKEN AT NAZARETH, GAZA, BEYROUT, AND OTHER PLACES IN SYRIA.

BY JAMES GLAISHER, ESQ., F.R.S.

In the accompanying tables, the same arrangement has been followed as in those given in previous reductions at these places, and which is described on pp. 103—105, *Quarterly Statement* No. III, 1869. The observations on which the tables are based are as follows:—Nazareth, 1869 October to 1871 March; Beyrout, from 1870 February to 1871 April, and 1870 October to 1871 April; Gaza from 1869 October to February; Jaffa, from 1869 November to 1870 February (no observations, however, taken during 1870 December); and at Ramleh, Beyt Nuba, and El Jib, for short periods during 1871 December—1872 March. At Nazareth no barometric observations were taken, and both at this place and at Beyrout the observer at times was compelled to cease observing, owing to the exigencies of the public service. With regard to the last three places above mentioned, the results are deduced for the period during which the camp was at each place; at Ramleh, however, the observations during 1871 December are divided into two groups, owing to the camp having been blown down on the 13th. The first of these groups, therefore, refers to observations taken at the camp, 230 feet above sea level, and the second to those taken at the Russian Hospice, 270 feet above the sea.

### ATMOSPHERIC PRESSURE.

*Gaza.*—The highest reading of the barometer was 30·630in. in Nov. 1869, and the lowest 29·348in. in March 1870. The monthly range of reading was small, and varied from about six-tenths of an inch in the winter months, to little less than two-tenths of an inch in the summer

months. The mean monthly values are also smaller in summer than in winter, and varied from 30·157in. and 30·171in. in October and November 1869, to 29·521in. and 29·547in. in July and August 1870.

*Beyrout*.—The highest reading was 30·230in. in February 1871, and the least 29·277in. in March 1870. The range is greater than at Gaza, but not to any extent.

*Jaffa*.—The readings show but very small variations in the three months, the ranges being small, and the mean values 28·8in. nearly in each instance.

#### TEMPERATURE.

*Highest Temperatures by day*.—At Nazareth, 99°·1 was recorded in October 1869. The two succeeding months in the year show a rapid decrease in temperature, the values being 89°·8 and 85°·8 respectively, while in the same months in 1870, 83°·0 and 72°·0 were registered. The value in January 1870 was 78°·9. In February, March, and April, 1870, the highest temperatures were all less than 90°, but in May a sudden increase to 104° occurred, followed by a decrease to 92½° in June, which was again followed by an increase to 101° in July. The values for the next two months were both in excess of 90°, and those for October and November above 80°, but for December 1870 and January 1871 they were 72°·0 and 67°·6 respectively.

At Gaza, instead of a uniform decrease in the four months ending January 1870, there was a higher temperature (93°·0) in November 1869 than in the other months, and the lowest (83½°) occurred in December. Increasing temperatures were then recorded, and the maximum for 1870 (107°·5) was reached in May. In June, a decrease to 88°·0 occurred, followed by an increase to 93° in August, but afterwards the values generally decreased to 79°·0 in January 1871.

At Beyrout the highest temperature was 81°·0 in March 1870, and the lowest 67°·0 in February 1871 (it is to be noted that there were no observations at this place from May to September 1870); while at Jaffa the highest was 85°·0 in November 1869, and the lowest 78°·0 in January 1870.

Thus for the whole period the maximum occurred in May 1870, and was 107°·5 at Gaza, and 104°·4 at Nazareth (unfortunately there were no observations at Beyrout during this month).

*Lowest Temperatures at night*.—At Nazareth in October 1869 the minimum was 55°·5; the values then decreased to 36°·5 in February 1870; but in March, 39°·6 was recorded, and 35°·8 in April. The temperatures then increased to 64°·4 in August, followed by a decrease to 33°·0 in February 1871.

At Gaza, in 1870, the minimum (39°·0) occurred in February and April, and 36°·0 was registered in February 1871. In June, July, and August, 1870, the values were all in excess of 60°·0, in September and October above 50°, and in November and December of the same year, between 40° and 50°.

At Beyrout,  $46^{\circ}0$  and  $45^{\circ}0$  were recorded in February and April 1870, and  $43^{\circ}0$  in February 1871. At Jaffa, in January and February 1870, the lowest values were  $36^{\circ}0$  and  $35^{\circ}$  respectively.

Thus for the whole period the minimum occurred in February 1871 and was  $36^{\circ}0$  at Gaza,  $43^{\circ}0$  at Beyrout,  $33^{\circ}0$  at Nazareth, and  $35^{\circ}0$  at Jaffa.

*Monthly Range of Temperature.*—At Nazareth the range was between  $40^{\circ}$  and  $50^{\circ}$  in each month, from 1869 October to 1870 March, with the exception of January 1870, when it was but  $36^{\circ}$ . In April and May it was  $49^{\circ}6$  and  $51^{\circ}6$  respectively; but from June to November of the same year less than  $40^{\circ}$ . In 1870 December and 1871 January respectively, it was as small as  $25^{\circ}7$  and  $28^{\circ}7$ , increasing again to  $40^{\circ}$  in February and March of the same year.

At Gaza the ranges varied (from October 1869 to February 1870) between  $31^{\circ}0$  and  $49^{\circ}0$ . In April the range was  $62^{\circ}0$ , and in May  $56^{\circ}0$ . From June to the end of the year the variations were but small, and averaged about  $33^{\circ}$ . At Beyrout much smaller ranges were experienced than at the two above-mentioned places, in the four winter months ending 1871 the average value being but  $15^{\circ}$ .

*Mean Temperature.*—At Nazareth the coldest month in 1870 was January, with a mean temperature of  $56^{\circ}6$ ; and in 1871, February, with  $51^{\circ}5$ . April 1870 was  $1^{\circ}8$  colder than March of the same year, but the means for the next two months (May and June) were nearly  $80^{\circ}$ , and those for July and August slightly in excess of that value. Those for September 1870 to January 1871 varied from  $76^{\circ}9$  in the former month to  $55^{\circ}4$  in the latter. At Gaza the coldest month was February in both 1870 and 1871, the mean values being  $58^{\circ}3$  and  $55^{\circ}4$  respectively. The means show a gradual decrease from October 1869 to February 1870; then, with the exception of April and June 1870, they increase to  $80^{\circ}9$  in August, which was the absolute maximum for 1870. From September 1870 to February 1871 a rapid decrease occurred. At Beyrout and Jaffa also the coldest month was February 1871, with mean temperatures of  $54^{\circ}8$  and  $59^{\circ}6$  respectively.

#### DIRECTION OF THE WIND.

At Nazareth the north wind averaged about eight days in the months May to October 1870, and varied from two to seven days in the remainder, while at Gaza its least prevalence was five days in April 1870, and from May 1870 to February 1871 it averaged fifteen days. The winter months of 1870—1 show a much greater prevalence of this wind than those of 1869—70. At Beyrout its general continuance was but small in December 1870, but one day only.

The east wind shows its greatest continuance at Nazareth during the winter months. In November 1870 it lasted eighteen days. No air blew from this quarter in August 1870, and for only one day in July and two days in September of the same year. At Gaza its prevalence was remarkably small throughout the whole period: in February 1870

it continued for six days; but in June it was entirely absent, and generally in the remaining months it averaged but one or two days. At Beyrout likewise its continuance was but small.

At Nazareth, south directions were less in their prevalence than either of the others. The general average was about four days, but less in the summer and more in the winter months. At Gaza the last two months of 1869, and the first five of 1870, were remarkable for the undue prevalence of this wind; in December 1869 it continued for twenty days, and from ten to fifteen days in each of the others. From June 1870 to February 1871 its continuance was very small, being entirely absent in July, and averaging but three days for the remainder. At Beyrout the general average was about eleven days. The west wind shows its greatest continuance at Nazareth during the summer months, averaging about sixteen days. In February and November 1870 it prevailed but for four days. It was less prevalent at Gaza, but shows the same excess in the summer, but averaging about thirteen days. At Beyrout its continuance was smaller still. At this place likewise calm days prevailed greatly at times, in December 1870 for thirteen days, and in April 1871 for ten days.

#### RAINFALL.

*Number of Days.*—At Nazareth the rainless months were May to September 1870. It fell on eleven and twelve days respectively in December 1869 and January 1870, followed by only three days in February, and then again by ten and thirteen in March and April. From November 1870 to March 1871 an increase is shown from two days in the former to seventeen days in the latter month.

At Gaza no rain fell in October 1869, and in February, May, June, July, August, September, and November, 1870. In the remaining months in the latter part of 1869 and early part of 1870, it averaged about four days, but from December 1870 to February 1870 its prevalence was greater; in the latter month falling on twelve days.

Beyrout shows a greater number of days, in the spring months varying from twelve to nineteen. At Jaffa it rained on very few days.

*Amount Collected.*—The rainless months at each station have been given above. At Nazareth the greatest fall from October 1869 to April 1870 was 4.41in. in March, and the least 0.07in. in October; the remaining months averaging about two inches. 0.38in. fell in November 1870, and 1.61in., 3.03in., 5.30in., and 8.03in. respectively in December 1870 and January, February, and March, 1871.

The greatest fall at Gaza was 3.12in. in February 1871; the nearest to this being 2.48in. in April 1870, 2.47in. in December 1869, and 2.38in. in October 1870.

The falls at Beyrout were much heavier, and averaged from 11.20in. in March 1871 to 0.59in. in February 1870. In February 1871 7.93in. fell, and 6.76in. in April, 1870. The greatest fall at Jaffa was 4.10in. in January 1870, and the least 0.05in. in February of the same year.







NAME OF STATION AND OBSERVER.	Year and Month.	Height above Sea-level.	BAROMETER.				TEMPERATURE OF AIR IN MONTH.					MEAN TEM- PERATURE OF			VAPOUR.				Mean Degree of Humidity, Mean Saturation=100.	Mean Weight of a Cubic Foot of Air.	WIND.					RAIN. Amount Collected.		
			Highest.	Lowest.	Range in Month.	Mean reduced to 32° Fahr.	Highest.	Lowest.	Range.	MEAN.			Air.	Evaporation.	Dew-point.	Elastic Force.	In a cubic foot of air.				Strength.	N.	E.	S.	W.		Calm.	Number of Days
										Of all Highest.	Of all Lowest.	Daily Range.					Mean.	of saturation.										
Jaffa, Syria.* H. A. Kayat, Esq. Lat. 32° 9' N. Lon. 34° 44' E.	1869 Nov. 1870 Jan. Feb.	feet. .. 200 ..	28.803 29.028 28.965	28.618 28.482 28.526	0.275 0.536 0.439	28.762 28.819 28.812	deg. 78.0 81.0	deg. 50.0 35.0	deg. 35.0 42.0	deg. 69.1 68.5	deg. 56.9 45.3	deg. 56.9 21.6	deg. 70.1 64.6	deg. 60.7 55.9	deg. 60.4 51.8	in. 526 385	grs. 5.7 4.3	grs. 2.3 1.6	71 72 67	.. 0.2 ..	.. 6 ..	.. 6 ..	.. 12 ..	.. 7 ..	1 4 1	in. 0.20 4.10 0.05		
The Camp, Ramleh,† Syria.	1871 Dec.	230	29.913	29.664	0.249	29.811	84.1	52.0	32.1	75.8	..	..	65.0	55.7	58.9	53.3	408	4.0	2.4	56	525	1.5	2	6	12	4	7	0.65
Russian Hospice, Ramleh.	1872 Jan.	270	29.985	29.555	0.430	29.797	68.0	47.4	20.6	62.2	52.2	10.0	57.2	56.1	53.2	50.5	360	4.1	0.9	82	534	0.8	11	6	12	4	7	4.23
Long. 34° 52' E. Bayt Nuba, Syria.†	1872 Feb.	775	29.991	29.559	0.432	29.760	71.2	46.0	25.2	62.8	43.1	13.7	56.0	53.5	49.9	46.4	316	3.5	1.1	77	537	0.8	11	10	10	0	10	5.57
Lat. 31° 51' N. Lon. 35° 2' E.	1872 Mar.	..	29.517	28.994	0.523	29.290	71.1	38.7	32.4	60.5	44.6	15.9	54.0	51.5	49.6	47.7	332	3.7	0.6	87	530	0.6	0	2	14	4	9	4.03
El Jib, Syria.§	1872 Mar.	2540	29.358	29.188	0.170	29.278	71.5	38.6	32.9	63.7	45.0	18.1	54.6	53.8	49.7	45.7	306	3.5	1.2	74	528	..	..	..	..	..	..	0.15
Lat. 31° 51' N. Lon. 35° 12' E.	1872 Mar.	..	27.577	27.157	0.420	27.389	74.3	39.0	35.3	63.4	46.2	17.2	54.8	52.6	40.1	39.6	243	2.8	1.7	62	495	..	..	..	..	..	..	0.95

\* 1869 November. The results are deduced from 18 days' observations.

† December. No observations taken.

+ 1871 February. The results are deduced from 20 days' observations.

and from the 14th to the end of the month the observations were taken at the Russian Hospice, viz., December 1 to 12; on the 13th the camp was blown down; ‡ March. The results are deduced from observations on the first five days only.

§ The above values are deduced from 18 days' observations only, viz., 6th to 23rd.

NAME OF STATION AND OBSERVER.	Year and Month.	Height above Sea-level.	BAROMETER.				TEMPERATURE OF AIR IN MONTH.						MEAN TEMPERATURE OF			VAPOUR.				WIND.						RAIN.				
			Highest.	Lowest.	Range in Month.	Mean reduced to 32° Fahr.	Highest.	Lowest.	Range.	MEAN			Air.	Evaporation.	Dew-point.	Elastic Force.	In a Cubic Foot of Air.		Mean Degree of Humidity, Saturation 1000.	Mean Weight of Air, Cubic Foot of Air.	Estimated Strength.	Relative Proportion of				Number of Days	Amount Collected.			
										Of all Highest.	Of all Lowest.	Daily Range.					N.	E.				S.	W.	Calm.						
Beyrout, Syria. S. Jackson Eldridge, Esq., Consul-General for Syria. Lat 33° 54' N. Lon. 35° 29' E.	1870	..	in.	in.	in.	in.	deg.	deg.	deg.	deg.	deg.	deg.	deg.	deg.	deg.	deg.	grs.	grs.	grs.	grs.	grs.	1.1	6	3	9	4	6	4	0.59	
	Feb.	..	30.080	29.515	0.565	29.904	71.0	46.0	25.0	61.1	63.6	7.5	57.4	57.7	58.7	50.1	362	4.0	1.3	76	535	1.2	3	1	12	0	9	12	4.33	
	Mar.	..	29.875	29.277	0.598	29.651	81.0	48.5	32.5	67.2	59.1	18.1	68.6	66.3	63.5	61.3	543	5.9	1.2	84	520	1.6	4	2	11	8	5	15	0.76	
	April	..	30.121	29.428	0.693	29.786	80.0	45.0	35.0	65.2	56.0	9.2	60.6	60.0	57.7	54.9	431	4.9	1.1	82	529	..	..	..	..	..	..	..	4.296	
	Oct.	..	29.939	29.578	0.361	29.792	76.0	60.0	16.0	73.1	65.7	7.4	69.4	69.6	64.8	61.1	536	5.9	2.0	75	520	..	..	..	..	..	..	..	0.78	
	Nov.	..	30.143	29.733	0.410	29.926	74.0	60.0	14.0	70.9	63.2	7.7	67.1	67.3	62.4	58.5	491	5.4	2.0	74	525	..	..	..	..	..	..	..	4.59	
	Dec.	..	30.057	29.514	0.543	29.908	69.0	53.0	16.0	65.1	57.8	7.3	61.4	61.4	58.0	55.1	434	4.8	1.3	80	531	0.6	1	4	11	2	13	12	4.59	
	1871	160	30.143	29.679	0.464	29.893	68.0	51.5	16.5	62.4	54.7	7.7	58.5	58.4	54.5	51.0	375	4.6	1.3	77	534	..	..	..	..	..	..	..	4.07	
	Jan.	..	30.230	29.610	0.620	29.951	67.0	43.0	24.0	58.0	50.6	7.4	54.3	54.8	51.0	47.4	326	3.7	1.1	70	539	1.4	2	3	11	4	8	13	7.93	
	Feb.	..	30.016	29.329	0.687	29.824	73.0	48.0	25.0	61.7	54.2	7.5	57.9	58.3	54.7	51.5	381	4.3	1.2	73	532	..	..	..	..	..	..	..	19	11.20
	Mar.	..	29.935	29.475	0.460	29.737	78.0	57.0	21.0	68.6	60.4	8.2	64.5	64.8	61.4	58.6	494	5.4	1.4	81	524	1.0	5	4	4	7	10	5	1.30	

NOTE.—From 1870, February to April, observations were taken at 9 a.m. and 10 p.m.; from 1871, October to April, at 9 a.m. and 9 p.m.

" October. The results are deduced from 19 days' observations only, viz., from the 12th to 30th.

" November. The results are deduced from 23 days' observations, viz., from 3rd to 30th.

" January. The results are deduced from 27 days' observations, viz., 1st and 2nd, and from 7th to 31st; observer away on public service.

" March 11th, no observations.

BAROMETER.—Highest reading, 30.230in. in February 1871; lowest reading, 29.277in. in March 1870; greatest monthly range, 0.693in. in April 1870; least, 0.361in. in October 1870. Highest mean value, 29.926in. in November 1870; least 29.651in. in March 1870.

TEMPERATURE.—The highest temperatures by day ranged from 81° in March 1870, to 67° in February 1871, and the lowest temperatures at night from 60° in October and November 1870, to 43° in February 1871. The extreme ranges of temperature were 35° in April 1870, and 14° in November 1870. The highest mean temperature was 69° in October 1870, and the lowest 54° in February 1871.

RAIN.—Greatest fall 11.20in. on 19 days in March 1871; least fall 0.59in. on 4 days in February 1870.



## CHURCH OF THE KNIGHTS OF ST. JOHN.

IMMEDIATELY to the south of the church of the Holy Sepulchre, and almost in the centre of Jerusalem, there has existed for more than 600 years an open plot of ground, upon which no buildings have been erected. This waste space, now known as the Muristan, was formerly covered by the spacious palace and hospital of the Knights of St. John, but until quite recently the only visible remains were a picturesque gateway, with figures representing the signs of the zodiac, and portions of a church and courtyard; the two latter so covered with foul refuse that few travellers ventured to give them more than a momentary glance.

In 1869, on the occasion of the visit of the Crown Prince of Prussia to the Holy Land, the Sultan made a grant of the eastern half of the Muristan to the Prussian Government, with permission to erect a church or rebuild that of the Knights of St. John. Excavations have since been actively carried on in this ground under the superintendence of Mr. Schick, who has kindly placed copies of the plans which he has made at the disposal of the Palestine Fund, and informed the Secretary of the result of his labours. The annexed plan shows the church of the Knights of St. John and the buildings immediately connected with it.

Nothing of very ancient date has yet been found, but additional excavations are to be made, and a new street is to be opened between David Street and the church of the Holy Sepulchre. During the execution of these works it is to be hoped that some interesting relics of the ancient city may be laid bare.

One of the most valuable of the results which may be expected from Mr. Schick's labours is the determination of the natural features of the ground in the vicinity of the Holy Sepulchre, which have been concealed from view for so many centuries. It is also possible that the excavations may settle the question of the site of the second wall of the ancient city.

An account of the hospital of the Knights of St John will be found in Murray's Handbook to Syria and Palestine, and Captain Warren has given a detailed description of his excavations in the Muristan in the "Recovery of Jerusalem."

---

## REPORT OF ANNUAL GENERAL MEETING,

HELD AT THE ROYAL INSTITUTION, 17TH JUNE, 1872,

HIS GRACE THE ARCHBISHOP OF YORK IN THE CHAIR.

The CHAIRMAN.—My lords, ladies, and gentlemen, I have to call upon the Reverend Mr. Holland to read the Report, and I must in



# CHURCH OF THE KNIGHTS OF ST. JOHN.

(GROUND PLAN)

Drawn by  
HERR C. SCHICK  
K.W. Baurath  
1872.

MASONS' MARKS.

o l U K

S

+ B

W

E V

☆ @

2

B

W

⊕

⊗

⊕

⊕

⊕

S  
T  
R  
E  
E  
T

very smooth wall

SQUARE

TOWER OR  
CISTERN  
BELFRY

SHOP  
SHOP  
SHOP

CISTERN

Rock at  
31 feet

GALLERY

several  
masonry  
wine presses  
were found  
here.

CISTERN 35' deep

SQUARE

GALLERY OR HALLS

GALLERY OR HALLS

large stones

GALLERY

DOME

large heavy stones

large stones

OPEN SPACE

NEW HOUSE

property of a Moslem

UNCOVERED STREET

BROKEN ARCHES

recently  
broken in





doing so express my regret that Mr. Gróve, who has been to so great an extent the bone and sinew of this enterprise, has been detained by other business, and cannot be present with us to-day.

The Rev. F. W. HOLLAND read the Report of the Committee.

"The Report which we have to lay before you this year, although a brief one, will be found to be in most respects highly satisfactory, not only as a report of work already accomplished, but also as a pledge of work to be done hereafter.

It will be remembered that at our last Annual Meeting a resolution was passed to the effect that "the meeting hailed with satisfaction the resolution of the Committee to take immediate steps to complete the Survey of Palestine, and pledged itself to support them in this important work." We rejoice to be able to report that the Survey thus resolved upon has been satisfactorily commenced, and in active progress for the last six months.

The first step in this important work was to find an officer possessed of the necessary experience in surveying, together with the peculiar qualities for survey work in Palestine. Such an officer the Committee found in Captain R. W. Stewart, R.E., of the Ordnance Survey in England. And besides Captain Stewart, the Committee had the good fortune to obtain also the services of Mr. C. F. Tyrwhitt Drake, well known as the fellow-traveller of Professor Palmer during his adventurous journey through the Desert of the Tih. Mr. Drake's services in the Survey will be of great value in his triple capacity of naturalist, archæologist, and Arabic scholar. His experience has been gathered not only from his journey with Professor Palmer, but also in explorations in Northern Syria, the Hauran, and the Anti-Lebanon with Captain Burton, and in Morocco.

The non-commissioned officers selected by Captain Stewart were Sergeant Black and Corporal Armstrong, of the Royal Engineers, both men known to himself, of tried intelligence and great experience. The choice of Captain Stewart has so far proved most fortunate, as the two men up to the present have shown themselves entirely worthy of the confidence placed in them.

The rest of the party is made up of servants hired on the spot. The non-commissioned officers left England in the autumn of last year, and were joined immediately on their arrival at Jaffa by Captain Stewart. After the preliminary unpacking and arranging had been accomplished, the firman granting permission to work was received in Jerusalem, and ground was broken near Ramleh by the careful measurement of a base line. Mr. Drake now joined the party. Most unfortunately, at this point the health of Captain Stewart broke down. After several weeks of severe suffering he was ordered to return at once to England, and came home in the hope that a short stay would enable him to go out again. In this hope he was disappointed, and found himself obliged, two months ago, to send in his resignation, which the Committee were compelled most unwillingly to accept.

Captain Stewart, who is present, will himself read a brief report of his work.

The Committee desire to express their deep sense of the loss to themselves, and the cause generally, from this unforeseen termination of Captain Stewart's engagement, and at the same time their sympathy with the disappointment he has suffered in thus having a work on which he had set his heart snatched from his hands.

It must not, however, be forgotten that the credit of the commencement, and the continuation, according to the directions he laid down himself, up to the present time, is due to Captain Stewart. And it speaks very highly for the careful maner in which the work was planned and started, that no interruption has been caused, the Survey having gone on as well, though not of course so rapidly, as if Captain Stewart were himself on the spot.

On his departure the command of the party was assumed by Mr. Drake, and the thanks of the Committee are due to that gentleman, not only for his ability in carrying on the work, but also for his readiness to assume the sole responsibility of the expedition. What that responsibility involves, travellers in the East can alone understand.

On the resignation of Captain Stewart, the Committee proceeded at once to apply to the War Office for an officer of Royal Engineers to take his place.

They are happy to report that a gentleman has been found, Lieutenant Claude Conder, who appears to be in every respect worthy to succeed the officers who have, before him, worked for the Fund. His arrangements are now entirely completed, and he starts for Palestine this very week. He is, unfortunately, prevented from being with us this day by the multifarious duties which his departure brings upon him.

The Hamath inscriptions, of which mention was made in the last Report, have been photographed and copied.

It is to be hoped that these curious inscriptions may ultimately be deciphered, and yield results of importance to the cause of Biblical investigation.

The work of exploration in Jerusalem has remained suspended since Captain Warren left the city, but the Committee have not forgotten that in Jerusalem lies the most important field of their labours, and that the results which will sooner or later be arrived at there will possess a wider and deeper interest than those obtained in other portions of the Holy Land.

They have found a gentleman whose capacity, attainments, and antecedents appear to fit him eminently for the post of explorer in the Holy City and its neighbourhood; and they trust shortly to be able to make a statement of the plan on which they propose during the next winter to prosecute the investigations so ably carried on by Captain Warren, into new and even more fruitful places.

The Committee have to deplore the loss of three distinguished members of their body. Sir Roderick Murchison, the late illustrious President of

the Royal Geographical Society, at all times took a warm interest in the work of the Fund. Dr. Alexander Keith Johnstone, in the foremost rank among English geographers, was always most active in promoting the interests of the Fund in Edinburgh, and from the commencement of our labours acted as honorary secretary to the Edinburgh Local Association. And, lastly, the Committee learn this morning, with the deepest regret, the death of Dr. Norman Macleod.

The interest which is felt in the work of the Society is shown especially in the circulation of the *Quarterly Statement*, which increases with every issue. The Committee desire that this publication should be looked upon as the best medium for recording important notes of travel or discovery in the Holy Land.

The amount received during the last year from all sources was £2,359 9s. 3d., an income not so large as in preceding years, owing to the partial break in the labours of the Society. The expenditure has been classified as follows:—

Exploration .. .. .	55·62 per cent.
Returned to subscribers in the form of	
Reports, Lithographs, &c. ..	22·76 „
Management. . . . .	21·62 „

The present position of the Fund appears quite satisfactory. The Survey up to the present time has received a liberal and sufficient support. A large sum has been already received this year, while the Society is, for the first time for three years, out of debt, and has in the banks a balance of nearly £800.

The Survey work, as it proceeds, will perhaps become more expensive, and entail the necessity of sending out more men. The Committee are quite confident that a work so important, so interesting, so necessary, before a right understanding of the geography of Palestine can be arrived at, will not be allowed to stop for want of funds. At the same time, they urge upon their friends to guarantee them to the extent of their power, and so to remove the difficulties and hesitation involved in working in the dark.

Lastly, the thanks of the Committee are especially due to those gentlemen who, by acting as Local Secretaries, are spreading a knowledge of the Society, and collecting funds, and to all those, present here or not, who by subscription or advocacy are advancing our cause.”

The CHAIRMAN.—I now have to call upon Captain Stewart to favour us with his Report, and in calling upon him to come forward, I cannot help expressing, on behalf of this Fund, my regret that one so eminently fitted to carry on this Exploration should be disqualified by illness, and that his return to the Holy Land has been forbidden by his medical advisers.

1 Captain STEWART, R.E., read the following Report:

“Before I enter into any statement regarding the progress of the Palestine Survey, I feel bound to explain that, owing to severe illness



which befell me very shortly after arrival in Palestine, I was able to do little more than commence the work. Much of the information which I shall lay before you is consequently derived from the reports of others rather than my own experience.

Mr. Drake, who took charge of the work from me, is well known as an accurate and accomplished Eastern traveller; I need not, therefore, do more than mention his name as my authority for the non-professional portion of the work; the non-commissioned officers of the Royal Engineers who were selected by me from the Ordnance Survey of Great Britain, have shown themselves worthy of the confidence trusted in them, and the observations sent home by them, and since worked out, speak in unmistakable language to the care and trouble they have taken and accuracy of the results in the autumn of 1871. The Committee of the Palestine Exploration Society did me the honour of offering me the charge of the Survey of Palestine. This Survey had for some years been contemplated as a fitting sequel to the excavations so successfully carried out in Jerusalem by Captain Warren, and the Survey of Jerusalem made by Captain Wilson and Lieutenant Anderson previously, and it was and is intended that this Survey should embody the results of all these explorers, and be as exhaustive as a scientific investigation can be.

Having accepted the post offered, the first duty which befell me was selecting the necessary outfit, which included camp furniture, our personal equipment, cooking utensils, and such like, for the nature of our work would necessitate living in tents, frequently far from towns of any size, and we must, therefore, depend largely on our own resources. The scientific equipment included surveying, meteorological, and photographic apparatus, presses for preserving botanical specimens, entomological and geological cases, &c. In selecting the scientific instruments, we obtained much assistance from the Government Departments. The Admiralty lent us chronometers, and from the Ordnance Survey Department at Southampton we got excellent and valuable surveying instruments, whilst from the Royal Observatory at Blackheath we obtained instruments with which to take meteorological observations. I mention these facts to show that although this work is for obvious reasons carried out by private enterprise, it still possesses the goodwill of the Government, which also assisted our undertaking by obtaining a firman or official authorisation from the Porte at Constantinople, authorising us to carry out the work, and desiring the Turkish officials to give the needful support and protection.

On the 21st October, 1871, the two non-commissioned officers started from Southampton, in charge of the instruments, stores, &c., whilst I followed a few days later by the Brindisi route, joining them at Alexandria. Here we were delayed a few days, waiting for a steamer to Jaffa, our port for disembarkation. Owing to the kindness of the Peninsula and Oriental Company's officer, we avoided landing our stores at Alexandria, but shipped them direct to the French steamer

for Jaffa, on its arrival from Constantinople. Everywhere during my sojourn in the Levant I found the mere name of belonging to the Palestine Exploration Society was a means of introduction and assurance of assistance. Whether this was owing to the genial qualities shown by my predecessors, or to the intrinsic merit of the Society's works, I am unable to say. At Jaffa our cases, thirty-nine in all, were exempted from paying duty, and were safely stored at the Jerusalem Hotel, which exists in the German colony which has sprung up lately in the outskirts of Jaffa. Amongst these well-conducted and hard-working colonists we stopped for a week, adjusting our instruments, somewhat shaken by the voyage. And then I started for Jerusalem, leaving the non-commissioned officers to complete our preparations for going into camp, also to take observations to fix the latitude of Jaffa, as that was to be our geographical point, to which the rest of the Survey is to be referred. As we were now in the month of November, at the end of a long dry summer, and no rain had fallen, there was literally not a blade of grass to be seen, the hard-baked ground was covered with a crop of ghastly limestones; yet a few weeks later when I travelled the same road, grass was springing up in all directions, and no doubt to travellers who visit Palestine in February or March, the plain country presents a luxuriant and fertile appearance. After calling on our consul and the English residents—but a small community, ten in all, I think—I found our firman had not arrived, so took advantage of the companionship of some other English travellers, and, together, we visited the Dead Sea and Jordan.

Finding on our return to Jerusalem that the firman had not yet arrived, I applied through our consul for a local order from the Pacha, but this he did not feel at liberty to grant, so I determined to commence operations at once and immediately purchased tents and engaged a dragoman to act as interpreter and general manager of our affairs. He was a Jew, by name Maham; for this race cling most tenaciously to the names of their forefathers. Returning to Jaffa we started on the 23rd November for Ramleh, which had been selected as a suitable place to commence the Survey by the measurement of our base line. And now, at the risk of being tedious, I must be allowed to say a few words regarding the principles on which the Survey is carried out: the first and most important duty is that of measuring what is technically called a "base line." As this line must be as nearly level as possible, a plain is the most suitable place for such measurement; this "base line" then becomes the standard of measurement to which all other lines can be referred by a mathematical process called trigonometry. This process is based on a known property of triangles, that if one side and the contained angles of a triangle are known the remaining sides can be calculated. The instruments we had brought with us were for the purpose of measuring those angles. A suitable piece of ground lying between the town of Lydda and Ramleh was found, and the base line measured three times with steel chains we had brought from England

for the purpose, and as the three measurements agreed very well we felt satisfied with the accuracy of the result. We had now a line of about three and a half miles in length fixed. Our next duty was to find suitable elevated positions to connect with the ends of the base line, by which means the country is covered with a net-work of triangles, the angles of which are measured by our theodolite, and our side ascertained by comparison with the base line, from which data the length of the other sides are found, or in other words the distances between these points. You must understand, then, that up to this date Mr. Drake and the surveyors have been engaged going from station to station, a most arduous undertaking in such a country as Palestine, where human life is held so cheap that the surveyors are always obliged to go in pairs and are armed, but I am glad to say no fracas has as yet occurred, and the only difficulty has been caused by the natives pulling down the posts, as they have a superstitious idea that the measurement is merely a preliminary to the sale of their land. So rooted is this feeling that I have been informed that when the telegraph posts between Jaffa and Jerusalem were first erected the natives pulled down and destroyed them, and this was only put a stop to by making the owners of the land on which the posts stood replace them at their own expense. Mr. Drake was obliged to adopt a similar mode of dealing with the Arabs on one occasion. As I was compelled to leave Palestine in January last I am obliged to quote the reports of others as to the present position of the Survey. Sergeant Black reports that 180 square miles of country have been triangulated, and a considerable portion of the detail filled in; the whole has been drawn in plan, and observations, made to connect this Survey of Jerusalem and vicinity with the former, are made by Captain Wilson, so that it will not be necessary to go over this part of the work again, but simply to reduce by scale the existing plans and transfer to our maps; in short, I may say that a tract of country extending from Jaffa on the coast to Jerusalem has been triangulated and laid down in our plan. This I believe to be satisfactory, but I would urge upon this meeting that if the strength of the surveying party were doubled the work would be carried out with double the rapidity, and yet at very small proportionately increased cost. This can be readily understood when you call to mind that the principal cost of the work is the pay of the officers superintending the cost of transit, guards, and such like. Now the cost of these items is the same for a party of two as for four surveyors. Therefore I may conclude by saying that the recovery of Palestine depends upon the British public who support the work, not as in the olden Crusading times by their blood, but by what is as potent in these days—their gold."

The CHAIRMAN.—My lords, ladies, and gentlemen, I hold in my hand letters from several eminent persons, who have expressed, in different ways, their regret at being unable to be here to-day,—the Rev. Charles Kingsley, the Very Rev. the Dean of Chester, the Lord

Bishop of Winchester, the Lord Bishop of Exeter, and several others. I am very sorry, for my own part, that the duty of presiding to-day has not fallen on the shoulders of some one else, because I have presided at these meetings for several years, and the very little I have to say upon the subject of this Exploration has been said again and again; and besides that, the Committee had cherished the hope that they should have induced a certain illustrious person to be here to-day who has been more than once round the world, and who has the ability to describe most vividly what he has seen. However, we have been disappointed in that hope, and you must, therefore, accept me for a moment. But I rely much upon the strength of those by whom I shall be supported. I shall have the pleasure of calling upon Viscount Ossington, who has done a great deal for biblical study, and also the well-known travellers, Mr. MacGregor and Dr. Mullens; Mr. Beresford Hope has also consented to speak on this occasion, and also Mr. Glaisher, who has surveyed the world *verticalement* more than any one else. I shall have besides the pleasure of calling upon M. Clermont Ganneau, and I shall have a word or two to say about him when he comes forward. Having spoken to you about those who are to follow, I will now say a few words about the business of to-day. About five years ago, a preliminary meeting was held to consider whether it was desirable to establish such a Fund as this or not, and a great many persons eminent in literature and knowledge of this subject met at the Jerusalem Chamber, and seemed to be unanimous in their agreement that whatever we thought about our knowledge of Palestine, the sum total of that knowledge was very small. Speaker after speaker told us, with remarkable unanimity, that about the natural history of Palestine we knew but little; that about its topography we knew but little; and that of its geography we really knew little or nothing. It was felt that at that time the mind of England was a sheet of white paper, as far as Palestine was concerned. But do not let us be unjust to those who have gone before us; there has been a great deal done already, and the writings of men like Robinson will never lose their value; but still, as science advances we become more exact, and there is a great want of exact knowledge even in the parts of the science in which those eminent men did so much. It might be admitted in one sense that this was not our business as Englishmen; and we did hear whispers that this was not our business, and that we might go out with a great deal of money and come back with a very limited result. Whispers of that kind attend every undertaking, whether good or bad—even the best is not free from them; but the answer is, that while in one sense Palestine is not our concern, in another sense it is, because it is the pride and honour of our nation—and this not shared by one sect, school, or party—that it has made the Bible its own book; it has done more than any nation for the knowledge and circulation of the Word of God, not merely for those who speak English, but for those who use all kinds of different dialects,



in all the corners of the world; and having this pride it is but natural that we should feel a wish for this collateral knowledge, and indeed for all those various branches of knowledge by which the Holy Scriptures can be best understood. About the money question I had no fear. It might from the nature of the case be expected that it would be said that our money appears to be wasted or spent for small results. But this country has a great deal of money to spare, and often spends it in foolish ways; and we could not think that for a good object money would be wanting. Now, when we look back upon those five years, we find that a sum of not far from £20,000 has passed through the hands of this Society, and that it has been spent in the manner you have heard upon the various objects of the Fund; fifty-five and a half per cent. of last year's expenditure went towards the expenses of actual Exploration, twenty-one per cent. for expenses at home—I am afraid that is a large amount, but it is not more than is necessary—and about twenty-four per cent. was applied to the production of reports and information which have been put into the hands of the subscribers. Now the interest that is felt in these subjects is manifest, because one result has been the sale of the book called the "Recovery of Jerusalem," in which the work of this Society is fully described; and there has been a large profit on that which in other respects might be considered rather a dry book, showing that this Exploration is felt to be a very interesting subject. Now we met very soon with what is the great obstacle in a work of this kind, because you will remember that as regards Jerusalem it was all work done under ground. I remember that Sir Henry Rawlinson appealed to us on that subject last year, and asked us whether, if we were to dig under the piers of York Minster to seek for a buried city, we thought we should be welcomed by the ecclesiastical authorities. It is obvious that there would be a great jealousy about explorations of this kind. The results are necessarily small. What can you find by digging a shaft to a great depth, and then running a narrow channel, compared with what you can do by surveying an open country from a neighbouring height? What can be done in Jerusalem has been already achieved, and we have now turned our attention to a subject which was not thought of when we began—that is, making a map of the country of Palestine. Again I think I hear you say it is not our business as Englishmen, and that that work might be left to somebody else. Yet there is nothing so useful as a map, and when we get the whole country made out as you see there (referring to a map), and when the different triangles have been worked out, when once you get the bearings of the principal points laid down, you will have a framework into which any discoveries that may be hereafter made by any traveller will be able to be fitted; you will establish a set of categories into which all future discoveries will come, and you will have done a great service to the subject. That leads me to another point: in addition to what this Society has done by its own explorers, we

hoped to raise up a greater interest in the subject; we hoped that not only our own explorers, but others, would be stirred up to look into these matters. And so it has proved: We shall be told that the Moabite stone was not discovered by our explorers, and that is true; but we seek to raise up an interest in the subject, and we seek to have a body of persons to whom anybody who makes a discovery may at once turn to see what the value of it is, and in that way an advantage as great as those gained by our explorers will be achieved. It is not necessary now to speak to you in the language of exhortation. The Palestine Exploration Fund has been before us for five years; it is for the first time out of debt; it has a balance at its bankers; it is doing a positive work of progress, of which you shall know from time to time; and I am sure that we shall not stand still for want of funds, and that the stream of your bounty will not fail. Speaking, not as a traveller, but as one of the home-staying public, I hope this institution will go on and prosper. I believe that accurate knowledge is never to be undervalued, and that the more we know about the Holy Scriptures from collateral sources, the more our belief in them will be confirmed, and that with the help of our investigations many things which when we read the text alone may seem dim and doubtful, will stand out more distinctly, and that the personages and events recorded will seem to live and act before us. I have now the pleasure of calling upon Viscount Ossington to move the first resolution. For myself, I will only add that I heartily wish prosperity to the Palestine Exploration Fund; I believe it did meet a great want, and I believe it will continue to enjoy your confidence and support. (Cheers.)

VISCOUNT OSSINGTON.—My lords, ladies, and gentlemen, I came here to-day to testify my respect to the Right Reverend Prelate who occupies the chair, and also to support by the best means in my power the object which the Committee has in view. The Right Reverend Prelate having called upon me to move the resolution, his request is of course a command, and I desire to execute it in a few brief words. The resolution which I have to propose is a very simple one—"That this meeting pledges itself to carry on the Survey so ably commenced by Captain Stewart and Mr. C. F. Tyrwhitt Drake." That is the present object of the Committee. Now many results may follow from a careful exploration of the country, quitting the usual and beaten tracks. The Jews were a hill-inhabiting people, and I think it is highly probable that the sites of many towns which have great interest for us and are of biblical repute may in this way be discovered. It is very difficult to satisfy ourselves about geographical matters from the descriptions of travellers. I remember a remarkable instance which happened in connection with this very Society not many years ago. You may remember perhaps that there was a careful examination made of Mount Sinai by officers of the Corps of Engineers, and a part of the model made from that survey now stands upon your table. A friend of mine who was engaged in a learned and important work, having read all

the books of travels, and all the accounts he could get, tried to fix upon the probable point upon which the law was delivered on Mount Sinai, and he had, after great pains and trouble, arrived at a certain conclusion. That conclusion was that the real spot was at the south end of the mountain; he thought that the majority of the authorities lay in that direction—always, I must take leave to say, with the exception of a distinguished traveller well-known in the neighbourhood of our Abbey, who now sits at my left hand, and who had himself entertained a different view, which I believe in the opinion of all now turns out to be the correct one. My friend having studied all these books, came to London, and he learnt that this survey made by the Engineers was to be seen. He went to see it. It was no doubt a painful thing for an author having made up his mind, and having expressed a decided opinion, to find that he certainly had been entirely wrong. He went to see that very plan, or one on a larger scale, and satisfied himself that according to the description in the Bible of the plain upon which the Israelites had been encamped, it was impossible that it could have been on the rough uneven ground such as these historians and narrators had fixed upon, on the south extremity of the range; and that, on the contrary, the north extremity possessed every requisite for the encampment of a numerous host, a valley expanding into a wide plain, extending itself from the very root of the mountain. It strikes me that that is a forcible instance of the value of a careful survey made by competent persons. It is now proposed that such a survey should be made of the whole of Palestine. I cannot conceive a more delightful possession than that would be: a good map is always precious—a map of Palestine framed on the scale of the Ordnance Map of England would be a most delightful possession to everyone. With these few words I beg to move the resolution. (Cheers.)

J. MACGREGOR, Esq.—My lord, I think we may safely assume that every school in every Christian country in the world has a map of Palestine, and there are thousands of maps of Palestine in private families, but we are now too sure of the fact that not one of these maps is correct, complete, or sufficiently minute. The resolution which has been moved, and which I have now the pleasure of seconding, pledges this meeting that we shall have a map of Palestine which shall be complete, correct, and sufficiently minute. If we had a complete map—it is a little country, only the size of Wales—we should know these three points about every mountain, town, and river in the country; how far east of London the place is—that is, its longitude; secondly, how far south of London it is—that is, its latitude; and thirdly, how high or low it is above or beneath London—that is, its altitude. Then if we knew these things we could fix many others afterwards that it is necessary to know. Very few persons are aware that our maps, even that one facing you, are very incorrect. I shall only take one verse in illustration of this: “Are not Abana and Pharpar, rivers of Damascus, better than all the waters of Israel?” Now in most of our maps

there is only one of these rivers, instead of two; in some maps they are both shown to run into the sea, though, in fact, there are 2,000 feet of mountain between them and the sea. There is such confusion in the maps about these two rivers that the questions of a little child would make us all ashamed of our ignorance; and after all these thousands of years it is remarkable that even the Jews in London cannot tell you the present names of these rivers. Now, besides being incorrect, our maps are incomplete; a great deal of the observation from which they are prepared having been done by private travellers, whereas it is essential to have the points established by professional men, in order to make sure of the main features. When I was on the Jordan I found there were ten or twelve miles of the map quite uncompleted. There was a great marsh to be mapped, and the question was when you got that, where this little bit was to be put into the real large map of Palestine. When I happened to look through the reeds and strange growth of papyrus, there was one small point of a hill which could be seen by standing up in my canoe, and I found that that identical point had been settled upon by Captain Wilson, who made an astronomical observation of it, and so any private traveller was able thereby to add his quota to the large map. We want to know how high and how low these places are, and to find out whether the "ups and downs" in the Bible are correct; and for this reason, a large slice of it, including the Sea of Galilee, is below the level of the sea; no other such place exists in the world. Therefore when we read in the Scriptures of "going down" to Capernaum, it is not going down as we call it, but actually "going down" 650 feet below the level of the sea. We want to know how high Jerusalem is above this Dead Sea, and so on. You will see one result of this by looking at this plate, and the water I pour into it from this jug. Suppose this is a large tract of country; when water is put into it (and there is salt in the clay), the water would become salt. Then if you suppose this plate a shallow lake, if the lake gets out into the sea, the salt will go away. The water is eating the salt out of the mountains; but if it runs on to this tumbler here, and supposing it is ten times as hot there as it is outside at the present moment, you will have the heat raising up the water in vapour, but the salt remains. Then what would be the result? This water in the plate, the Sea of Galilee, will be always fresh, but *that* below will have salt in it, and it will become brine; and therefore in this Dead Sea we find hundreds of feet of rock-salt. Altitude influences this, and the climate and the fruits. Believing, as I do, that it is most important to have a complete, accurate, and sufficiently minute map of Palestine, I am sure I may do well to second the resolution. (Cheers.)

A. J. BERESFORD-HOPE, Esq., M.P.—My Lord Archbishop, I feel myself much honoured by being called upon to support this resolution. My Lord Ossington and Mr. MacGregor have pointed out to you the importance of the work in which we are engaged—the Survey of Pales-



tine—and also the singular smallness of the country which is to be surveyed. When we consider the enormous, the overwhelming interest that, to all Christian nations of the world, this little land of Palestine possesses, I say it is no less than a disgrace to Christendom if we do not, as Christians, as Englishmen, and as civilised men, make ourselves acquainted with every the least detail of the geography, the archæology, and the history of the land in which the most thrilling and sacred records of the Gospel are centred. When I say this, I feel that I say so in the name of all the civilised and Christian world; but what, my Lord Archbishop, what is the reason why England should especially come forward in this work? You have given one and the highest reason for the obligation, namely, that England has made the Bible her own book. There is also another reason which is not so sacred, but which is still very important. What has been the pride of England?—what has been the boast of England? England's onwardness in everything that shows strength of mind and strength of muscle. England was the first nation that explored the trackless wastes of the Northern Sea; England was the first nation that sent her ships to be crushed and played with among the icebergs in the Polar Ocean; England, if she has not attained the North Pole, has found the North-West Passage; England, or let me say more accurately, Britain, has sent her sons to explore the heart of Africa; and our own England it is which has taken every ice peak of Switzerland as her playground, and gaily planted her foot upon the Matterhorn. Viewing all this, it will be not less than a disgrace to our civilisation, our Christianity, and our common sense, if, after having made enterprise our own in those regions in which discovery simply implies the unveiling of the dumb present, simply the record (geology apart) of an actual condition, widowed of all the stirring illustrations which in old lands come from traditions of past history, we are then found lagging on a spot where discovery is the unlocking of the great treasure-house of the world's supremest chronicles. If we explore the heart of Australia, or the lakes of Africa, and yet leave this little district, a few counties broad, of Palestine, within a few days' steaming from our own country, untracked and undeciphered, it will be a disgrace to us as Englishmen. I repeat that England in her enterprise, in her science, in her literature, in her love for the Bible, in her muscularity, and in her determination to be the great travelling nation of the world, has given pledges from which she cannot retract, that she shall not leave the Holy Land alone and uninvestigated. On these grounds, my Lord Archbishop, I do urge—the door having been opened for us—that we should undertake and prosecute a work like this, which is so comparatively easy to what it was in our fathers' times, and that, now steam and magnetism and the sun and the elements have all sworn together a great oath that science shall no longer be impossible to man, man shall ratify that oath on the sacred soil on which the deepest hopes of his redemption are planted. I call upon this Society, as representing the education, the good feeling,

and the reverence of England, most heartily to support this resolution. (Cheers.)

The Rev. Dr. MULLENS.—My Lord Archbishop, I will support this resolution in a very few words, because I have little claim to the attention of this meeting, especially in the presence of so many travellers in Palestine, never myself having had the opportunity of paying that country a visit. But I have had, my lord, the opportunity of helping forward the work of this Society, in paying a visit to our friends in America. It was through a lecture delivered by my friend Dr. Allon and myself in New York, in the presence of a large number of ministers and laymen, that we were able so to stir the hearts of our friends in that city as to induce them to found a Society for the Exploration of Palestine similar to our own; they started with the understanding that they should survey the country east of the Jordan, and that the work to be done west of that river should still remain to the Exploration Fund in England. We need not surely any additional arguments for carrying out an excellent scheme like this. Those of us who know Palestine by reading the works of successive travellers like Irby, Mangles, and others, can desire nothing more than that all the maps that have come from the work of those travellers shall at least be thoroughly corrected by that which alone can put them on a sound basis, namely, by a careful trigonometrical survey. Those who are acquainted with the trigonometrical survey of our Indian Empire, as well as with the Ordnance Survey of Great Britain and Ireland, will see with what ease, considering the smallness of the country, this important work can be carried on. We have heard from Captain Stewart what able men are available as assistants in carrying out the Survey, and we must all rejoice that the Fund was induced to take this valuable scheme in hand. We must have observed the readiness which even the most scientific and scholarly travellers have exhibited, when they know they are in the district in which particular localities did lie, to prove that these interesting sites are in the districts they have passed over. One of the most noted illustrations of this is to be found in the numerous suggestions that have been made for the site of the Great Fountain of Kadesh, in the Southern Wilderness. We may also take another instance in which Dr. Robinson identifies a great ruin at one place, whereas had he known more about it he would have found that it was two or three miles away in another direction. All these things have been found and laid down for us by Professor Palmer and Mr. Tyrwhitt Drake, and when we see the results of such careful surveys, and what valuable improvements have been made in our maps of the Peninsula of Sinai, I am sure we shall all unite in wishing this enterprise of the Trigonometrical Survey of Palestine God-speed. (Cheers.) I have great pleasure in supporting the resolution.

An amendment was moved by Mr. MOONEY, but no seconder being found,

The resolution was put and carried.

Mr. GLAISHER moved the next resolution: My Lord Archbishop, from the first day that an opportunity presented itself to me of obtaining scientific information in that most interesting country of Palestine, I eagerly accepted it; urging upon those who were about to travel in and explore the country, the importance of ascertaining all about its topography, its archæology, and its climate. We knew next to nothing of Palestine five years ago, but we did read in the Bible that it was a land of corn, oil, and honey, producing almost everything needed by man; and we were led by inference to conclude that it has a climate of a most extraordinary character, indeed that it must be a land of many climates to produce so many things. The first thing I did, therefore, was to urge upon my friend Mr. Grove to send out instruments, which I obtained and furnished him with myself, to be used to ascertain the character of the climate of Palestine as a matter of science, a subject of which we were in utter ignorance, and which was one of no mean importance. Now, I am able to state that I hold in my hand here a paper which I have prepared, to appear in full in the Quarterly Report of the Palestine Exploration Fund,\* upon the observations which have already been made. In this paper I confine myself to the meteorology of the country, and it will be found that it exhibits some remarkable characteristics. The temperature rises to 104 deg. in May; and the meeting will be able to judge of what this means when I say that to-day it is 84 deg. with us, and that it was 86 deg. yesterday. And then not only is the temperature as I have stated it in the month of May, but when we come to June, July, August, and September, it exceeds ours by many degrees; and when I look at the characteristics of a climate which day by day averages nearly 90 deg., I wonder how it has been found possible to work out this survey as a whole. I have been myself a trigonometrical surveyor on the Ordnance Survey of Ireland, and I am astonished how a diagram like that presented to us could have been completed. I may be permitted to say that a base line such as that, implies that three or four miles of country have been measured with the utmost accuracy, and everything depends upon it. If that line is correct, every other line will practically be so too. I have looked carefully into this diagram, and I see that Captain Stewart has completed a series of triangulations on one side—coming round here also on the other—and so deduced a verification of it. I have examined and checked the diagram, which can scarcely speak to others, as it does to me, of Capt. Stewart's judgment and knowledge in carrying out this survey. (Hear, hear.) I have already said that there must be many climates distinct from each other in a country like Palestine. There is not a drop of rain for several months together; but in January, February, and March more than half the days of the month are rain—eight inches of rain in one place, eleven inches in another, and elsewhere not more than two or three. It is a climate without many clouds. Professor Tyndall

\* See p. 92.

has often told us in this room how the water in the atmosphere prevents the heat from burning up everything; and we know now what comfort we feel when there is a cloud before the sun, and how useful clouds are at night to prevent radiation; but in Palestine there is this burning heat by day, and to work under those circumstances is something exceedingly difficult. I would impress upon our Committee not to urge too much upon the gentlemen who are sent out there, particularly in these months. Of course we are thankful for everything they do; but it is important that they should not expose themselves to needless risks, and we should take care not to exact from them more than can reasonably be expected. As the time is getting on, I will not trespass upon you longer. I shall place this paper in the hands of the Secretary, with a view of its appearing in the next Quarterly Report. The motion I have to propose is, "That it is desirable to provide means to secure an accurate record of all archæological discoveries that may be made in the progress of the Survey"—we have already had the Moabite stone, and I would urge the importance of taking steps by which records of an archæological nature may be preserved, "and also of examining as far as possible the physical phenomena and natural history of the country." This will of course include geology and meteorology, to which I have devoted a great part of my life, and I would urge upon every one connected with this Society to increase our means of knowledge by enabling the Committee to continue their observations. I have great pleasure in moving the resolution which I have read to the meeting. (Cheers.)

The CHAIRMAN.—It is now my great pleasure to introduce to you M. Clermont Ganneau, and I only regret that he will have to address you in a language less familiar to us than our own. M. Ganneau's name is already known to us in connection with the deciphering of the inscription on the Moabite stone, and as a great authority in Semitic scholarship; indeed, his word is law on such subjects. I have persuaded the Very Reverend the Dean of Westminster to address the meeting after M. Ganneau, and from him we shall be glad to hear some remarks upon that gentleman's address. (Cheers.)

M. CLERMONT GANNEAU\*.—There is certainly no other country which offers attractions to one who loves to investigate the past, similar, or equal, to those of Palestine. Not only have we the detailed narratives and the topography of the Bible, but also a long continued chain of descriptions from the earliest ages of Christianity to the present day. We have, besides these, a perfectly marvellous fixity of local traditions among the native populations, especially as regards the nomenclature. These populations represent the ancient races of these countries. We may find among the fellaheen, descendants not only of the Hebrews, but also of those tribes which, conquered by the Hebrews, have yet lived on in the country, and have resisted all the numerous waves of invasion which passed over Palestine. Among these are to be found traditions, oblite-

\* M. Ganneau addressed the meeting in French.



rated, indeed, and reduced to childish stories and popular legends, which yet, if carefully and intelligently collected, would throw light upon the history, the religion, and geography of the Hebrews. Modern *savants*, following the example of Robinson, have already had recourse to this mode of obtaining information for the identification of places. At the same time, the greatest care must be taken not to be misled, as has already happened in many instances, by fallacious resemblances. A profound knowledge of Arabic dialects, as well as of Hebrew, is indispensable before undertaking what is really the most delicate manipulation. And great philological experience is so much the more necessary to one who interrogates fellahs, that there are many facts of the highest importance, philologically speaking, in the idiom itself of the fellahs. We call this Arabic; it contains, in reality, a vast quantity of forms and archaic phrases which carry us back far away, and to an epoch when the Arabs had not as yet conquered the land of Canaan.

Permit me here to quote, in order to show how important popular tradition may be, when properly employed, certain observations which I have myself made. Let me first mention the "Stone of Bohan." This, as you know, is mentioned in the book of Joshua as one of the points marking the frontier line between the tribes of Judah and Benjamin. It is nothing more than the "Stone of the Thumb," and is called now the "Stone of the Finger"—"*Hadjar el Asbah*."\*

There is also the Stone of Zoheleth, which I have found in the village of Siloam, under the identical name *Zehweile*. This identifies En-Rogel with the "Fountain of the Virgin."

Bethesda is nothing more than the present Church of St. Anne, where an old tradition has placed the house of the mother of Mary, calling it *Beit hanna*, "House of Anne." Now this expression is exactly identical with *Bethesda*, both signifying *House of Mercy* or *Compassion*.

I could cite several other important places whose sites I have discovered principally by means of these popular indications; for example, the long-sought Adullam, which is called at present Edoumiyeh; Azekah, now called Azhik; the royal Canaanite city of Gezer, found by me more than a year ago in the Tell el Djezir, near the little village of *Abou Shusheh*, which Mr. Drake, to whom I communicated my theory, has since visited.

If Palestine is abundantly provided with historical documents and popular traditions; it is singularly destitute of archæological treasures. In spite of the number of travellers who have visited its soil, in spite of the excavations which have sounded its depths and furnished the solution of topographical problems, we must acknowledge an almost absolute want of inscribed monuments, the land of the Jew furnishing in this respect a strange contrast to Egypt, Greece, Rome, and even Phœnicia. Not even in the tombs, which in other countries furnish us with a pale but exact reflection of the living world, do we find an inscription. This *lacuna* ought to be filled up. Some isolated but significant discoveries have recently come to light, showing that we must not despair of finding in Biblical

\* See *Quarterly Statement*, April, 1871. New Series, p. 105.

countries original documents of the greatest importance. It will suffice to remind you of the Moabite stone, which is undoubtedly a grand fact in the history of archaeological discovery. This monument gives us at once the most ancient known example of its alphabet, and, so to speak, *an original page of the Bible*. And I may mention here that, side by side with the famous passage containing the name of Jehovah, or Jahveh, the sacred tetragram of the Jews, I have deciphered, since my first publication, a new passage where mention is made of 'the *Ariel* of David, taken by King Mesha at Ataroth, and dragged by him before the face of Chemosh at Kerioth.

I have had the good fortune to discover another monument, which, although it does not go back so far as the stone of Mesha, is not the less one of the most interesting and venerable Jewish monuments yet found. I speak of a stone of the temple, bearing a Greek inscription which prohibits the Gentiles under pain of death to enter the sacred precincts. An exact reproduction has been made of it, and now hangs before you. This precious monument was buried in the foundations of an Arab edifice some metres distant from the Mosque of Omar, that is to say, close to its original place. Two letters only were visible above ground. Attracted by their palæographic appearance, I began to dig, and was happy enough to uncover the whole block. The translation, with a few remarks of my own, has been already published in the *Athenæum*, and by the Committee of the Palestine Exploration Fund. It is remarkable from many points of view. It reproduces certain expressions actually used by Josephus, who teaches us that the balustrade round the temple was surmounted at regular intervals by pillars having inscriptions in Greek and Latin forbidding strangers to enter. It throws light on one of the principal events in the life of St. Paul, threatened with death on the charge of having polluted the sanctuary by introducing a Gentile. It is the only authentic relic yet discovered of the temple itself. It has been a witness to the preaching of Jesus, and besides all this, it may, in the hands of *savants*, be made an instrument of investigation in clearing up the obscure question of the temples of Solomon and of Herod. The block on which the inscription is engraved is, in fact, by its dimensions, by the manner in which it has been wrought and cut, a specimen of Herodian work. It may thus serve to help us to distinguish between the work of Solomon and that of Herod. And it may further serve as an excellent *point de départ* for the construction of a palæographic scale for classing chronologically the Greek inscriptions of Jerusalem.

I will add that I have a conviction that we shall certainly find more such inscriptions in Jerusalem, whether in Greek or Latin, of the same period. Up to the present the texts found in Palestine and Jerusalem have been few in number and of small importance. Those in Greek and Latin have been published by Mr. Waddington. They amount in all only to *ten*; and all that have been found in Jerusalem are contained in a single page of the Count de Vogüé's great work. Researches undertaken under conditions by no means favourable, and in the rare occasions of leisure left

me by my official duties, have enabled me to collect, besides the texts already mentioned, upwards of eighty unpublished inscriptions in Hebrew, Greek, and Latin. Such a result, obtained with insufficient means, enables me to hope that much more may be done if we are provided with the necessary resources for a more complete investigation.

Among these inscriptions there are some of great palæographic and historical value. Among others I will cite two Hebrew texts in Phœnician character discovered by me at Siloam, and given to the British Museum, where they will soon be deposited. Two Hebrew *cachets* in Phœnician characters give the Biblical names of Ananias, Azarias, and Achbor. These four texts belong to the time of the kings of Judah. There are also several inscriptions in square Hebrew, two of which are bi-lingual, Greek and Hebrew; a weight in stone with a Greek inscription dated from the reign of a king new to history; a votive inscription of some great Roman lady named Pompeia Lucilia, engraved upon a slab of marble found on the side of Bethesda; two inscriptions of the Roman legion named Fretensis, one of those legions engaged in Titus's siege of Jerusalem.

In the vast quarries which extend under Jerusalem, and are now called the Royal Caverns, I found cut in the rock by some workman an exceedingly old and curious *graffito*. The original now lies on the table before you. It is a mere design, but represents exactly one of those Assyrian animals, winged lions or bulls with human heads. It is the more curious inasmuch as the Hebrew cherubim have been by some, not without appearance of reason, identified with those fantastic monsters.

A rapid *résumé* such as this is at least sufficient to show that the soil of Palestine, systematically examined, will break the long silence which it has hitherto preserved, and we may hope to see the disappearance of that strange anomaly of a total absence of inscriptions close to the very cradle of that most glorious of human creations, alphabetical writing. To find these buried treasures it is not necessary to search in the regions beyond the Jordan, where excavations will for a long time be extremely costly and dangerous. Without going so far, it is at Jerusalem itself, or in its environs, that we must seek in order to find contemporary annals of the kingdoms of Judah and Israel. That we shall do so I am sure, provided we attack certain points previously determined on by careful considerations of history.

Jerusalem itself, although it belongs to that category of cities so ungrateful to archæology, because they live a continuous life, and therefore, so to speak, slowly devour themselves, is far from being exhausted. A large number of topographical questions are still in suspense, some of capital importance, such as the site of the Tombs of the Kings of Judah, and waiting for a solution. Let us hope that the solution of these problems will be effected through the agency of this Society—a fitting crown to their noble work.

The Very Reverend the DEAN OF WESTMINSTER.—In the very tropical state of this atmosphere, approaching almost that of the

Valley of the Jordan, I will not detain you long. I am in the novel situation of dragoman of the dragoman of the French Embassy in Constantinople. I take it for granted that most of you have been able to follow M. Ganneau's most interesting paper, but I will just run through the main points which he has touched upon, showing the opportunities that are opened to us by this Exploration Fund, and showing also the great services that an intelligent resident in Palestine like M. Ganneau is able to render to our objects, and which we the more value, because being a foreigner, and not being specially connected with us, we feel bound to acknowledge the honourable manner in which he has behaved with regard to the antiquities he has told you of, and especially with regard to the Moabite stone. (Hear, hear.) It is a lamentable circumstance that rivalry between nations should have penetrated into the Holy Land, but it is very gratifying that, in this instance, foreign nations feel, like us, the importance of the subject, and that, like us, they are above those petty disputes. (Hear, hear.) One of the points upon which M. Ganneau chiefly dwelt, as opening themselves more and more to our investigations, is what has always struck me, namely, the remains of the ancient primæval inhabitants of the country before the occupation of the Holy Land by the Israelites. This is the more interesting because it may possibly be more easy to find from their hands monuments of a more primæval country, such as we find at Stonehenge and Avebury, and other remains of works executed before the Norman conquest in this country. M. Ganneau mentioned various monuments which reach back to those times, but which were, perhaps, turned to new purposes by the Israelites. Nothing is more interesting or more likely to be discovered than those ancient and venerable stones which have existed in Palestine from remote ages; and it was with extreme delight that I heard M. Ganneau say that he believed he had discovered two such relics as the stone of Bohan and the stone of Zohemoth. It is impossible to read the mention of these in the books of Joshua and Kings, and not wish to lay our hands upon them; and if M. Ganneau has done so, I congratulate him with all my heart. (Hear, hear.) His great knowledge of the subject, the fact of his living on the spot, and his familiarity with Arabic, has enabled him to identify with more certainty than had been done before, the names of different places mentioned in Scripture. Amongst these is Scopus, "the look-out place" mentioned in the Maccabees, and which he has found by its identity with the modern name which means "the Observatory." Then again that place known as Adullam, which is so interesting to politicians in England. I remember speaking to a distinguished fellow-countryman of M. Ganneau, M. Montalembert, and he was complaining that in his own country, where the Bible is not so well known as it is in England, no one could guess what could be meant by the "Adullamites;" it was even thought to be a company of some kind. Now that the actual place bearing the name of Adullam can be identified by



M. Ganneau, I should hope that all his countrymen will for the future know as much as we do about all its meanings, historical, geographical, and political. There is also Gezer, that old city which M. Ganneau has found out, and I am glad to learn that he made this discovery of Gezer so long ago as last July. Others have come upon his track since; but it was well known to M. Ganneau long before, when he mentioned it to my friend Mr. Grove, who, I may say, has begged me to explain, what I am sure you all regret, that he is prevented being present to-day to see the results of this Fund, to which he with so much zeal and energy has contributed. (Cheers.) What M. Ganneau has said about the Tombs always struck me. To whom these innumerable ancient tombs belonged to we do not know now; but we may be able in them to find traces of the history of Palestine which have not yet been discovered. Then, with regard to inscriptions, we come to the Moabite stone. I need not enlarge upon that. It is what M. Ganneau says, it is like finding an original page of the Bible itself. There is no reason why the actual inscriptions on the Moabite stone should not have been incorporated by the authors of the books of Chronicles and Kings. It would then have been in reality, what he now calls it metaphorically, an original page of the Bible. (Hear, hear.) Then he has found an original page of Josephus. Poor Josephus often meets with but very scanty justice, but the inscription from the Herodian Temple does bear out what Josephus describes as having been written on the enclosure of the temple, namely, that any one who came within those rails or palisades, if they penetrated within, would be put to death. The whole of this bears most directly upon that most wonderfully vivid scene which is described in the twenty-second chapter of the Acts. He also tells us what I was not aware of before, that there are inscriptions reaching back to the times of the kings of Judah; and if so, there is no reason why, by greater exploration and research, we should not find many more of such inscriptions. (Hear, hear.) While M. Ganneau's account is extremely interesting as describing what he has done, it is also extremely stimulating to find what can be done by us by such funds as you are able to place at our disposal. (Cheers.) I have expressed to you the regret that I have in Mr. Grove not being present on this occasion. There is another name which I cannot help mentioning, because I am sure there is no one here present who does not regret the loss the country has sustained in the death of Dr. Norman Macleod which we have heard of this morning. Dr. Norman Macleod had expressed in a letter which I hold in my hand, his great desire to be present on this occasion, but owing to medical advice he was prevented coming, and the catastrophe which has deprived the world of his genial and charming presence was the result of that illness. (Hear, hear.) It is now my pleasing duty to ask the meeting to return their thanks to His Grace the Archbishop of York for the unfailing zeal and ability with which he presents himself on these occasions. His Grace

has many avocations, and it is most gratifying to find him again presiding at an institution to which from the first he has given his countenance, and for which we owe him still greater gratitude because he has not been drawn to it, like myself and others, from local interest in the soil of Palestine, but from an abstract love of knowledge which prompts him so far as he can to do anything that can throw light upon the sacred history of the Bible. (Cheers.)

Professor E. H. PALMER.—I rise with great pleasure to second the resolution of thanks to the Archbishop of York. This meeting has been one of the most interesting I have ever had the pleasure of being present at; for although the Palestine Exploration Fund has always had good work to report to the public, yet I doubt whether it has ever been better or more usefully engaged than it is at present. The Survey of Palestine is a work that has long been wanted, and the party that has now gone out is the most suitable for this purpose that could have been chosen. The officers and non-commissioned officers of the Engineers are proverbially well-fitted for their work; but the party now in Palestine have the valuable aid of Mr. Tyrwhitt Drake; and I am pleased to take this opportunity of testifying to his immense value as an explorer, and to his possession of indomitable courage and perseverance—qualities which are essential to an archæologist, but more particularly to the traveller in Palestine. No one but those who have been there can understand the difficulties that constantly beset an explorer's path. Besides guarding against danger to himself, he has to exercise all his ingenuity to counteract the cunning devices of the fellahen to withhold information from him or lead him astray. (Hear, hear.) Under these circumstances, his task is by no means an easy one. Mr. Drake travelled with me for twelve months, and I can assure you that he is well able to overcome these difficulties, and I congratulate the Fund on having so valuable a person to support their labours. (Hear, hear.) Ladies and gentlemen, I will not detain you longer, but will conclude by seconding the motion that we return our cordial thanks to the Right Reverend Prelate in the chair. (Cheers.)

The resolution was carried unanimously.

The CHAIRMAN.—My lords, ladies, and gentlemen, before we separate I desire to thank you for the mode in which you have received me; and I would add one word in order that we should part on good terms with regard to the adverse motion which has been made. If I may return once more to that simple illustration of our friend Mr. MacGregor, I should say that the gentleman who spoke of the importance of attention to moral ruins has treated the funds available in this country as a small fixed quantity, like a glass of water, of which none should go abroad because all of it is wanted at home; but the fact is that the Fund upon which we draw is inexhaustible. Its task is to raise people up to that which is noble and good, and out of that Fund you will elicit something for all the objects and all the charities which the

mover of the amendment has in view. I do believe that the more you ask the people of this country to give, the more they will give, and I am sure that not one of you would have anything to do with this Society if you thought that we were hurting any other philanthropic objects. (Cheers.) I thank you for the reception you have given me, and hope we shall meet again next year. (Loud cheers.)

---

### NOTE ON VASES FOUND AT THE BIRKET ISRAIL.

BY GREVILLE J. CHESTER, B.A.

IN "The Recovery of Jerusalem," p. 479, mention is made of certain vases of massive black ware discovered at Birket Israil and elsewhere, which I there ascribed "with very great hesitation as belonging" to the Græco-Phœnician period, and of which I stated that "considerable doubt exists as to their proper appropriation." I am now able to assert positively that these vases are of early *Arabic* manufacture. Among the vast pottery-strewn mounds of Fostat, Musr-el-Ateekah, or Old Cairo, I found in January in the present year a vast number of broken vessels of the very same description, and immediately associated with lamps and other Arabic pottery. One perfect specimen of conical form, which I have placed in the British Museum, is coated with a glaze of greenish blue identical with that found upon numerous Arabic lamps found in the same mounds, which are formed of the *débris* of the Arabian city of Fostat, and contain antiquities of no other period.

---

NOTE.—The translation of the Talmud Tract on the Measurements of the Temple, published in the January number of the *Quarterly*, was written by the Rev. Joseph Barclay, D.D., lately of Jerusalem.

## LIST OF NAMES EAST OF JORDAN.

The following list of names was collected by Captain Warren during his reconnaissance survey of the country East of Jordan. The Arabic orthography is that of the dragoman who accompanied the party, and the transliteration and interpretation were kindly supplied by Dr. Sandrezcki, of Jerusalem :—

- العواقية Al Āwâkyéh. [عَوَق the bend of a valley.]\*
- قصر نواقيس Kaṣr Nawâkîs, pl. of *Nákûs*, signifying a board or plank of hard wood, which serves instead of a bell in the Oriental churches.
- الشماساني Ash Shamâsâni, perhaps a derivative from شماس *shammâs*, deacon.
- الجرانين Al Jerânîn, or dual *jerâneîn* (جِرَانِ jerân, the interior part of a camel or horse's neck), *jarân* (جَرَان), angry. [جَرِين a threshing floor.]
- رجم الرواق Rijm ar Rewâk, the tomb (heap) of the portico.
- تل البركة Tell al Birkeh, hill of the reservoir.
- تل الكو Tell al Kaû (perhaps from كَاء v.a. كَوَّ retreat, or from كُو window).
- رجم الشوك Rijm esh Shûk (shok), the heap (tomb) of the thorns.

\* The words between square brackets [ ] are a few suggestions which have occurred to me while passing Dr. Sandrezcki's MS. through the press.—E. H. PALMER.



ضهرة المقتا Dzahret (Dhahret) al Mukṭâ (the back, ridge, summit of the — (perhaps مَقْتِي servant).

The pronunciation is against a derivative from قَطَعَ مَقْطَعٌ.

جبل عجلون Jebel 'Ajlûn.

واد(ي) البَيْضَة Wady al Beïdhah (of the egg). [Perhaps بَيْضَاء "white (earth)."]

واد(ي) الحمام Wady al Ḥamâm, Pigeons' valley.

واد(ي) يجوز Wady Yajûz. Three valleys which meet at the  
رَيْتَلَفَا فِي الزَّرْقَاءَ Zerkâ زَرْقَاءَ.

أم حلالافية Umm Ḥalâlâfiyeh. [حَلَالَفِيَّة Halâfiyyeh, fruitful in the plant, *half*, "a sort of feathery reed"].

الْجَبَائِيَّات Al Jâbâyyahât. [جَبَاءَة natural reservoirs of water.]

طلعة العالي (علي) Talâât al 'Alî (talât), aspect (face of the high one).  
[Talât, a small path or gully by which one can ascend a mountain.]

قصارَة تُغْرَة Kaşâret Thoghra (kaşârah, shortness; kuşârah, house, chamber, small portion of). Probably  
Kaşârat ath thoghreh, bend of the neck (between two mountains or valleys).

خربة أم الصباع (ضبع) Khirbet Umm adh Dhabâ (sing.) Dhibââ. The ruin of the mother of [*i.e.* abounding in or frequented by] the Hyena or Hyenas.

رأس الصيرة Râs as Sîreh, head of the fold.

الطَبَقَة At Tabakah, stage, story, floor.

ضهرة حمار Dhahret Hemâr (back, ridge, summit of the ass).  
[This form does not occur in Arabic proper. ضهر would mean a "mountain top," ظهر "a back."]

الرَّوَادِقُ Ar Rawâdik ? [Perhaps from رَدِغ *radigh*, "a muddy spot." The Dragoman is likely to have been misled by the pronunciation of the Bedawin who pronounce ق as our *ch*, and in some parts as our hard *g*.]

خربة صار (صارَة) Khirbet Sâr (ruin of the صَارَة ridge, summit).

الْكُرْسِيَّ The throne, seat.

أم حنابطة Umm Hanâbiteh (?). (حَنَابِجُ small ants.) [Perhaps from عُنْبُطَة "compact," ع and ح often interchange in the Bedawi dialect.]

خربة ضابوق (ضَبُوق) Khirbet Dhâbûk (?).

خربة خلدَة Khirbet Khaldeh, perhaps from خَلَدَ mole.

خربة الصَّقْرَة Khirbet as Sakrah, perhaps = of the hawk [also the name of a tribe of Arabs in this neighbourhood, the Beni Sakr].

رجم الغماق Rijm al Ghamâk (?). *Rijm* signifies "a cairn."

رجم الشِّبْهَاءِ Rijm ash Shibhâ. [شُبُهَاءُ *shubuhân* "wild thyme."]

جربة الصفاوية Khirbet as Safâwyeh. [صَفَاءَ "bare rocks."]

سهل الحِمَا Sahl ak Himâ (حِمَاءَ and حِمْيَ) prohibited, a thing prohibited, hence *territorium* (*arcis*).  
The plain of the prohibited ground.

رجم جَعَاصَة Rijm Jaââṣah (جَعَسَ *Jās*, merda, stercus).

خربة الحَوَايَة Khirbet al Hawâyeh (?). [أَحْوِيَة "tents of goats' hair."]

رجم عَمْرَابِو النَخَامِيرِ Rijm Omar Abu 'l Makhâmîr (?).

رجم البَحَارِ Rijm al Bahâr (perhaps *bahâdr*), the cairn of the mariner (بَحَارِ regions, gardens, pools).

رجم ابو معوايذ Rijm Abu Mâwâîdh (?).

- رجم الوابضة Rijm al Wâbidheh (?).
- وادي الصقرة Wad(y) aş Şakrah, vide *suprà*.
- البيت Albett (?), separation, one who goes away, vanishes.
- وادي الارنب Wad(y) al arnab, the valley of the hare.
- تل الميسة Tell al Misch, hill of the (?).
- بلاد اجحار Belâd Ajhâr, the region (tracts) of *Ajhâr* (which may also be translated, of dens).
- بيض احمار Baïdh Âhmâr (Himâr), the white tract of Himâr, or the ass.
- وادي المائة Wad(y) al Mâyeh (perhaps مائة of the hundred, or *al ma* (vulg. موية moyeh) of the water.
- رجا الوسط Rijm al Wassat, the cairn of the middle.
- وادي دير عبار Wad(y) Deir 'Abâr, valley of the convent of 'Abâr (?).
- وادي جحرة Wad(y) Jahrah (the valley of the den).
- مكسر Maksar (Makser) a trunk, stem.
- البكرة Albikreh, the Virgin.
- المرقب Almarkab, the look out.
- العوائية Alâwâtyeh (?) (العوالي perhaps *alâwâly*) [or عواقيه see the first page of this article].
- طحين Tahîn, meal, flour.
- البحجار Aljahâr (perhaps *al Ajhâr*, see above).
- النوبلسية Annawablissiyeh (?).
- وادي الظلامه Wad(y) Adz dzalâmeh, the valley of darkness.
- وادي الدالية Wad(y) ad dâlyeh, valley of the vine (vine-arbour) or water-wheel.
- وادي السير Wad(y) as Syr (?), *Seir* = marching, journey, expedition.

كرم أبو شيبان Karm Abu (y) Sherbân, the vineyard (plot) of  
Abu Sheibân.

مطال السيرة Maṭâl as sÿreh. [Extension of the march.]

شجرة الصراع Shajret adh dharââ.

واد(ي) الاشتا Wad(y) al âshtâ, شَتَا a rough place, the head  
of a valley (*shîtâ*, winter?).

قَرْيَعَة مَنْصُورَة Karaïâh Manşûreh (قَرْيَعَة the best part of a  
house; the second word is apparently a proper  
name; it signifies protected).

خربة القصير Khirbet al Kiÿsr (Kasîr). [*Khirbeh*, "ruin,"  
*Koseir*, "a little palace."]

خربة العوالي Khirbet al 'Awâlyeh (perhaps العوالي high tracts  
of land).

مغارة الدير Maghâret ad deîr, the cave of the convent.

خربة نيني Khirbet Nîni.

واد(ي) بلال Wad(y) Balâl (Belâl), valley of moisture.

خربة سعادة Khirbet Sââdeh, ruin of Saâdeh (blessedness, bliss).

تلّ العريمة Tell al ârÿmeh, hillock of the foss or moat.

خربة دُبَّة Khirbet Dubbeh, the ruin of the she-bear.

كنيسة الخضر Kanîset al Khidhr, church of Elias (St. George).

كنيسة صارة Kanîset Şârah, the church of the ridge, but  
probably سارا *sârâ*, the church of Sara.

عين جزير Āin Jazîr (is est quem incolæ pagi eligunt, ut  
vices eorum agat in expensis pro eo, qui a parte  
Sultani apud eos divertitur); perhaps جزير  
butcher.

أم إرقايس Umm Irkaïs (perhaps from إرقايس).

جسر خيصار Jiṣr Khaïdhâr, bridge of Khaïdhâr.



- أبو طارق Abû Târik. [The father of (*i.e.* frequented by)  
“the benighted traveller,” but perhaps the proper  
name of a man.]
- جبل خندق Jeb'l Khandak, The mountain of the foss.
- جبل أم عاوية Jeb'l Umm Âawyeh, the mountain of the mother  
of the howling (*i.e.* jackal).
- جبل أم بلاوط Jeb'l Umm Balâtût, the mountain abounding in  
Ballaut (perhaps بَلَوْتُ *Quercus Ballota*).
- وادي (ي) النهادي Wad(y) ân Nahâdy [perhaps plural of نَهْدَاءُ sand-  
heaps].
- بئر السبيل Bir as Sabîl, the well of the road, a *sebil* is a  
public drinking fountain bequeathed by some  
pious person.
- وادي (ي) الجريعة Wad(y) al Jariâh, perhaps جَرِيْعَة draught of  
water.
- وادي (ي) الرمل Wad(y) ar Raml, the valley of sand.
- ثَغْرَةُ السَّجُور Thoghret as sujûr (sajûr), the neck of heating,  
of fuel, or of water filling (the river).
- طَلْعَةُ رِيْمَة Talâat Rîmêh the face, aspect (perhaps appearing),  
[طَلْعَة mountain path or gully] of the sepulchre  
(*Rîm*), or رِيْم the white doe.
- عَرْقُوبُ الْخِلَال Arkûb al Khilâl, mountain path, or summit of  
the interstice [fissure].
- عين جريعة Aîn Jariâh, v. *supra*.
- وادي (ي) العظام Wad(y) al 'Idzâm, of the bones.
- تَبْعَةُ السَّوَيْمَةِ Tabâat as Suwaïmeh (what belongs—whether  
men or country—to Suwaïmeh).
- السَّوَيْمَةِ As Suwaïmeh. [سَوَام sawâm, cattle going to  
pasture.]
- التَّوَامِين At Toâmîn (perhaps *Toâmêin*, the twins).

- دلال Dalâl (*dallal*, broker, pedlar, hawker). It might also signify the guide.
- شكارة النجار Shakaret an najâr (if *Shukret an nujâr*, it might be translated "redness of the colour.") (*Shakreh*, abundance of milk in the udder; *najjâr*, joiner, carpenter.) [Perhaps from شجار *shijâr*, "wood-work," the *k* being often pronounced *ch*.]
- نَقْبُ عَيْنِ جَدْيِ Naḵb ʾain jedy, mountain pass of *ʾAin Jedy*, i.e. the fountain of the kid.
- بلاد السِّرِّ Bilâd as sirr, the region (tracts) of the best part of the middle of the valley.
- سوق الطعيمة Sûḵ at Tâimeh, market of her who is neither (lean) thin nor fat [proper name].
- نقب القداد Naḵb al Kādâd, mountain pass of the hedge-hog.
- خربة المرحجة Khirbet al merjeh, ruin of the meadow.
- واد(ي) الدرباس Wad(y) ad derbâs, Wady of the lion (or the savage (biting) dog).
- واد(ي) المشaide Wad(y) al Mashâideh (perhaps *mushayyede*, a high edifice or one plastered with gypsum).
- واد(ي) حبثا Wad(y) Ḥabathâ (perhaps *habith*, the serpent with the truncated tail).
- واد(ي) أم أدسيس Wad(y) Umm Âdsîs (probably *dasts* = *dâsûs*, he who explores secretly).
- واد(ي) الغاب Wad(y) al Ghâb, of the wood (or cane brake).
- بناية صقر Binâyet Şakr, the structure of *Şakr* (as nom. prop. [of an Arab tribe] signifying hawk).
- شُوَيْتَةُ الدِّيَابِ Shûweinet ad diyâb, perhaps the granary of the *Diâb* (nom. prop. [of a branch of the Adwân Arabs] signifying wolves).
- واد(ي) أفدheil Wad(y) Âfdheil (nom. prop.).

جبل السور Jebel as Sûr, the mountain of the wall.

تَلِّ الْهِلَالِي Tell al Hilâlî (nom. prop. of the *Sheikh Hilâl هِلَال*  
=new moon).

وَادِ (ي) جَرِيْعَة Wad(y) Jaryâh, see above.

وَادِ (ي) الْمَهَافَة Wad(y) al Mahâfeh (may have some connexion  
with هَيْف a hot wind, S.W.)

وَادِ (ي) الْبَحَار Wad(y) al Bahâr.

وَادِ (ي) نَاعُور and نَاعُور Wad(y) Nâûr, the Wady of the water-wheel.

وَادِ (ي) أَبُو عَيْنَيْن Wad(y) Abu 'Aïnein, the Wady the father of  
[i.e. possessing] the two springs.

وَادِ (ي) السَّيْر Wad(y) as Sîr (?).

وَادِ (ي) إِدْلَيْكِ الْبَقْر Wad(y) Idleik al Baqr (?).

وَادِ (ي) أَمَلَاكَة Wad(y) Amalakah (?), (*Muallak*, "hung," "de-  
pendent").

وَادِ (ي) الْقَصِير Wad(y) al Kîşîr (*Kaşîr*, short).

وَادِ (ي) الْجَحَار Wad(y) al Jaħar, see above.

عَرْقُوب سَهْبَا Ārkûb Sahbâ, mountain-path (*Sahb*, desert, plain,  
سَهْبَة deep well), السَّهْبِي nom. *deserti cujusd.*

وَادِ (ي) عَبْيَان Wad(y) 'Abyân, وَادِ الْقَبْرِ (or) وَادِ or Wady al Kabr,  
of the tomb (?).

وَادِ (ي) حَصَاصَا (ة) Wad(y) Haşâşâ (has perhaps connected with  
حَصَّ crocus).

وَادِ (ي) الْمَيْطْرَضَة Wad(y) al Mÿtirdheh (?), *Mitredah*, high way.

وَادِ (ي) عَوَيْضَة Wad(y) 'Aweïdhah, nom. prop.

رُكْبَة الْمَتَخ Rukbet al Matkh (*Mittikkeh*, a shepherd's staff),  
*Rukbeh*, a knee, also the root of a certain plant.

بَنِي نَعِيم Bany Nâim.

وَادِ (ي) النُّوَيْطِي Wad(y) an Nûweïty.

- خشم المَرَاة Khashm al Marâseh, the mouth [outlet] of Marâdheh.
- قلعة يَاعَيْن Kâlâat Yââin. The fortress of Yââin.
- سَاعَة وإِجْرَابَة Sâât u Ijrâbeh (*sâât*, "hour," *ijrabeh*, "having scabby camels," etc.), ? v. also *Ijrâdbbeh*.
- الطعيمة At ṭâimeh (neither lean nor fat, fem.).
- ميراج الحيران Mirâj al haîrân (?). *معراج* ascension (especially Mohammed's to heaven) of the astounded one.
- وادي قبر أم محمد Wad(y) Kabr Amhamed, of the sepulchre of Mohammed or Ahmed (في وادي البحار), in valley of Jehâr.
- وادي سَعِير Wad(y) Sâir (ardent, fiery, fire, flame).
- وادي الفار Wad(y) al Fâr (of the mouse).
- قبر شيخ Kabr Sheikh, Sheikh's sepulchre.
- جورة البيض Jôret al Baïdh, ditch of the eggs (also navel, middle of anything) (region).
- تل الكفرين Tell al Kafreîn, the hill of the two villages.
- وادي البويب Wad(y) al Bûweib, valley of the small door (gate).
- عين سُوَيْمَة ʿAin Sûweimeh, spring of Suweimeh.
- البوارضة Al bûwaridheh (بارض the first germs).
- شونة سُوَيْمَة Shûnet Sûweimeh, the granary of Suweimeh.
- قلعة أم ابو الحسين Kalât Umm Abu'l Husseîn, the castle of the mother of the father of Husseîn. [Probably أبو الحصين the castle frequented by the fox; which animal is called in Arabic the "father of the fortress."]
- وادي النشوري Wad(y) al Nathûry (*nathûr*, she who bears many children).



وادي عيافة Wad(y) 'Ayâfeh (iyâfeh) of auguration.

خربة سُوَيْمَة Khirbet Sûweimeh.

وادي أبو الحسن Wad(y) Abu 'l Ḥusn (father of beauty).  
[أبو الحصين fox.]

نَقِيب الرمل Nuḳaib ar Raml (the small mountain pass of the sand).

وادي مُشْقَار Wad(y) Mushḳâr (*Mushḳârr*, he whose hair is light-coloured).

خربة لِسْرَا Khirbet Lisrâ (?).

خربة الكَفِير Khirbet al Kafir (?).

خربة القَوْجِيَّة Khirbet al Kûjîyeh (*Kûj*, a female head ornament).

خربة المَصْلُوبِيَّة Khirbet al Maṣlûbiyeh (derivative from *Maṣlûb*, crucified), place, ruin of the crucified. [This is a large cairn.]

جَلُول Jalûl (?).

أم العَمَد Umm al 'Amad (mother of columns).

الترْكَمَانِيَّة Al Turkmâniyeh, the Turkman (tract, etc.).

مَدْيَبَة Madiyyabeh (?).

تَلّ المَسِيَّاج Tell al Massîâj (?) (*Sîâj*, hedge).

السَّامِك As Sâmik (the high one).

جبل عَتْرُود Jabl 'Atrûd (?).

زَرْقَاء مَاعِين Zerḳâ Mââ'in.

المَوْجِب Al Mûjib, the efficient (also God). [The local pronunciation is *Mojib*, not *Mûjib*; it is not impossible that it may be connected with the name of the country Moab; the letter *j* is occasionally substituted for a semivowel; see Lane's dictionary (letter ج).]

شِيحَان Shihân, long (*Sheihân*, jealous, sedulous, long).  
[The Biblical Sihon. It is sometimes locally pronounced *Shûhân*, especially by the Beni Hamîdeh.]

أم الرصاص Umm ar raṣâṣ, the mother of lead. [See "Desert of the Exodus," p. 500.]

السَّوَاكَة As Sûwâkah (*Suwwâk*, with long legs, *spathe* of palm-tree).

زملة العاليا (عَلَايَة) Zimlât al 'Alâyâ ('Alâyah). *Zimleh*, group of small palm-trees. *Zumleh*, troop; *zemeleh*, family; *ulâyah*, high place.

لُب Lub (heart, marrow, the best part of any thing).

العال Al 'Ââl.

الدير Al Deîr, the convent.

عيون موسى 'Uyûn Mûsa, the springs of Moses.

وادي أبو النمل Wad(y) Abu'n neml, the Wady the father of [frequented by] the ant.

وادي قرن كبش Wad(y) Kar'n Kebsh (ram's horn).

ضهرة قرن كبش Dhahret Kar'n Kebsh, ridge (summit) of ram's horn.

جبل مُشْقَار Jabl Mushkâr, see above.

قبر عبد الله Kabr 'Abd Allah, sepulchre of Abdallah.

عرب المصلاحي Arab Almaslâhy (?).

رجم اصرارة Rijm Asrâreh (Isrâreh) (?).

خربة أم رمانة Khirbet Umm Rummânah (mother of pomegranate).

جبل حوارة Jebel Hawâreh (?) (*huwâr*, new-born camel).

تل الجلول Tell al Jalûl (?).

خربة أم العمدة Khirbet Umm al 'Amed (mother of columns).

- تَلّ العَرِيش Tell al 'Arîsh, mound of the bower, green cottage.  
 ['*Arîsh* is also used in the Bedawî dialect for a "wooden hut" or "hovel"; it corresponds with the עֲרִישׁ of Og king of Bashan, in Deut. iii. 11, translated in our version "bedstead," but probably signifying "sarcophagus."]
- وَاد(ي) الْحَبِيس Wad(y) al Habîs, *Habîs*, a horse dedicated to pious uses.
- خَرْبَةُ امِّ التِّين Khirbet Umm at Tîn, mother of the fig-tree.
- جَبَل أَحْبَس Jebel Aḥbas, *aḥbas*, superlative of *ḥabs*, a large mountain.
- خَرْبَةُ بَاطِم Khirbet Baṭîm (?).
- جَبَل الصَّوَّانَةِ Jebel aş şawwâneh (the mountain of the flint stone).
- خَرْبَةُ مَاسُوح Khirbet Masûḥ (?).
- خَرْبَةُ الْعَال Khirbet al 'Âl (?), see above.
- جَبَل الْيَدُودِيَّة Jebel al Yadûdiyyeh.
- جَبَل الْمَنَحَار Jebel al Minhâr (he who slaughters many camels; liberal, munificent).
- الْبَرَائِ Al Barâk, a kind of water-fowl (white); *Birâk*, a kind of fish. (Probably *El Birak*, "pools.")
- خَرْبَةُ امِّ الْاَبَرَائِ Khirbet Umm al Abrâk (mother of the Barâk).  
*Birak*, "pools," (pl. of بَرَكَة which is the same as بَرَائِ).
- خَرْبَةُ بَيْتِ زُرْعَةٍ Khirbet Beît Zurâat (of the house of seed or tillage).
- وَاد(ي) الْمَنَحَر Wad(y) al Manhar, the Wady of the place of slaughter or sacrifice.

خربة ام الحنّافش Khirbet Umm al Khanâfish (?) *Khunâfish*, lion.  
or *Khunfesâ* (sing. *Khinfis*), beetles.

ام الكندب Umm al Kundub (?). [Probably جندب *Jundub*,  
a species of locust. I have before observed that  
the Bedwîn east of Jordan pronounce *k*, *ch*.]

ام الرمان Umm ar rummân (the mother of pomegranates),  
see above.

خربة ابو نكله Khirbet Abu Nukleh (*Nukleh*, migration).

جبل الصبارة Jebel al Dhabâreh, the mountain of firmness or  
compactness.

تلّ البناية Tell al Binâyah, the mound of the building.

واد(ي) نعور Wad(y) Nâûr.

ام قصير Umm Kişîr (*Kaşîr*), see above.

ام السماق Umm as sumak (*Summâk*, *Sumach*).

مرج ستّثا Marj Setthâ (?) (*setthâ*, meadow).

تلّ جواية Tell Jûwâyah (?).

سحيرة باعث Sahîret Bâith (*sahîr*, he who has pain in the  
bowels; *bâith*, he who sends, gives impulse).

خربة بلاعث Khirbet Balâath (?).

خربة ماعين Khirbet Mâîn.

جبل المعالية Jebel al Mâlâyah (?).

خربة زبود Khirbet Zabûd (?).

خربة نبا Khirbet Nabâ. [=the Biblical *Nebo*.]

خربة المعلّقة Khirbet al Mâlâkah (Milâkah), the ruin of the  
thing dependent or adhesive.

طيّ طيّ Tî Tî.

- جبل ام المدارس Jebel Umm al Madâris (mother of the colleges, schools).
- جبل الرجحاً Jebel ar Rajhâ (?)
- خربة المرصاص Khirbet al Marṣâṣ (?) (see Umm Rasâs).
- خربة ضهرة احمار Khirbet dhahret Aḥmâr (probably ضهرة حمار), of the back of an ass.
- تل طحين Tell Taḥîṇ (the mound of the meal or flour).
- جبل فغار البينصار Jebel Faghâr al Baïdhâr (?).
- خربة البناية Khirbet al Benâ'eyeh. [The ruin of the building.]
- الجواية Al Juwâ'eyeh.
- السامة As Sâmeḥ, pit, vein (lode).
- واد(ي) المصخور Wad(y) al Maṣḥur (?), صحر among other meanings, signifies to be ample, roomy, and also in the XI. conjugation to be of a russet hue.
- اليدوده Alyadûdeh (?).
- ضهرة جماعة Dhahret Jamââḥ (the ridge or summit of assembly, assemblage).
- خربة دبة الخمان Khirbet Dubbet al Khamân (of the *she-bear* of the elder), *debbêḥ* also means a vessel, sand, a sandy hill, flat ground.
- خربة السوق Khirbet as Sûk (of the market).
- تل خمان Tell Khamân, the hill of elder.
- خربة الذيزة (ذيزة) Khirbet az (probably *dh*) zîzeh (?), *lezîzeh* لذيزة agreeable. [I heard it pronounced *zîzeh* the full name being زيزة مشاش *zîzet emshâsh*, زيزة means "a small hill," and *emshâsh* is Bedawî Arabic for "holes dug in the sand for water," "shallow wells."—E.H.P.]



## جُوَايَة Juwâyeḥ.

وادي (ي) العماري Wad(y) al 'Amâry (?), (n. prop.).

رجم الفهود Rijm al Fahûd (fuhûd), heap of the "cheetars,"  
or hunting leopards.

رجم الحواية Rijm al Hawâyeḥ (?), (the cairn of collecting, etc.).

ضهرة جزوع Dhahret Jazââ (*Jazûâ*, impatient, *Juzûâ*, im-  
patience).

أم الخنافيش Umm alkhanâfish, see above.

الصواوين Aṣṣawâwîn, flints.

سهلة المحلا Sahlet al Maḥlâ, plain of Maḥlâ.

ارجم سليم (رجم سليم) Arjeim Salim (probably dimin. of  
*rijm*), the little cairn of *Salim*.

هربكة الثماض Harbaket ath thamâdh (?).

ضبة مشتي Dhabbet Mashtâ, lizard of winter. مَشْتِي  
(winter-quarters مَشْتًا).

خربة برازيم Khirbet Barâzîm (?), the ruin of Barazîm.

الزبارات Azzabârât (?) (*Zabr*, stones). صنوب Sanawber,  
pine-tree.

ماسوح Mâsûḥ, v. 9, l. 4, from above.

سهل ام قصير Sahl Umm Kişir (Kaşir), see above.

الدلالة Ad dalâleh, the guide.

المقايين Al Makâyyîn (?), *Mukâtalîn* (?).

عراق الحمام 'Arâk al Ḥamâm, the rocks, rocky steep, of the  
pigeons.

ثغرة تاسين Thogret Taşîn, neck of Tâsîn (?).

القوسمة Al Kawâssimeh.

ثُغْرَة أُمِّ رَمَضَانَ Thogret Umm Ramaḍân, the defile of the mother of Ramaḍân.

أُمِّ أَصَوَاوِيَّة Umm Aṣwâwīyeh.

بَحَار Bahâr (*Beḥâr* from بَحْرَة low ground, garden, pond, etc.).

مُنْطَار عَمَانَ Munṭâr 'Amân (?), (نَظَر to be watchman).

عَبْدُون 'Abdûn.

الصَّقْرَة Aṣ Ṣakrah, see above.

عَرَاك عَيْشَة 'Arâk 'Aisheh, the rocks of 'Aisheh.

وَادِ (ي) عُش Wad(y) 'Ush ('Ushsh), the valley of the nest.

رَجَم أُمِّ الرَّمَام Rajm Umm ar ramâm (رَمَّة rimâm rotten bones).

تَلَّ الشَّمَّاسَانِي Tell esh Shamâsâny, see first page.

خَبْرَة الْمَرْقَة Khirbet al Mirkah (the ruin of stinking wool).

[مَرْقَاة a ladder.]

رَجَم الْمَرْقَب Rijm al Marḳab, the cairn of the look-out.

مَشَارِف (مَشَارَف) eminences.

وَادِ (ي) الْقَطَار Wad(y) al Kaṭâr (Kīṭâr), (قَطَر) rain, drop. قَطَار string of camels.

جَبَل النَّوَاصِف Jeb l an Nawâṣif (نَاصِفَة a channel or rock in the middle of a valley; also a plain or field).

زِمْلَة الْأَدَم Zimlet al Âdâm, for *Zimleh* see above; *Âdam* signifies a horse on whose breast or throat there is a white mark.

خَبْرَة الْكَاف Khirbet al Kâf, the ruin of Kâf (?).

خَبْرَة الْمَنْسِيَّة Khirbet al mansīyeh (the ruin of the forgotten one, fem.).

تَزْرَة تُصَيْن Tezret Tuṣîn (?).

قلعة النواكيس Kalât an nawâkîs (ناتوس board of hard wood, used instead of a bell).

واد(ي) الحدادة Wad(y) al Hadâdeh (*haddadeh* signifies a female smith or worker in iron, fem.).

خربة عُرجان Khirbet 'Urjân, the ruin of the lame ones.

الملفوف Al Malfûf, the involved.

واد(ي) الحمام Wad(y) al Hamâm, the Wady of the dove.

منبوعه من عيبرة Manbûaa min 'Abhareh (نبع a spring). عيبرة signifies a fleshy damsel.

جزيرة Jazîreh, island.

أم الأشرط Umm al Ashrat, mother of the vilest.

واد(ي) الفصيل Wad(y) al Faṣîl, the Wady of the weaned (camel, etc.).

واد(ي) العوجه (أ) Wad(y) al 'Aujâ, the Wady of the crooked stream.

واد(ي) المدهدرة Wad(y) al Mudahdahreh (?).

يسكب في البركة Yaskub fi'l birkeh, "it pours (act. s. neut.) into the pool." [Apparently a description of the last mentioned Wady.]

غور بسان Ghôr Basân. *Ghor*, a hollow, especially the low ground surrounding the Dead Sea.

جبل صفص Jebel Safadh (?).

واد(ي) ما حص Wad(y) Mâḥiṣ (perhaps sparkling).

واد(ي) الأزرق Wad(y) al Âzraq, the Wady of the blue one.

واد(ي) اعظام Wad(y) Âadhâm (?) (عظام bones).

واد(ي) الخرقاة Wad(y) al Khirkeh, the Wady of the rag, or of the swarm of locusts.

تل الجلودي Tell al Julûdy, the mound of the skinner.

- خربة النوم Khirbet an Nûm, the ruin of Nûm.
- تل سودة Tell Suwâdeh (*suwâd*, multitude; *sawâd*, blackness).
- واد (ي) الدارس Wad(y) ad dâris, the valley of him who reads, learns.
- يسكب في شعائب Yaskub fi Shâaib, "it pours into the brooks."
- قرية الفحص Karyet al Fuḥeis, the village of Fuheis perhaps (a proper name).
- تلل بطانة Telâl Baṭâneh (*bitâneh*, secret, middle of a town, region; friend; voracity).
- عين قطف الصهور Āin Kaṭaf al Dhuhûr, spring of the Kaṭaf (a certain tree) of the summits.
- ماحص Mâḥiṣ, see above.
- واد (ي) الأزرق Wad(y) al Āzraq.
- قرية كتة Karyet Kitteh, village Kitteh (كتة greens, كتة inferior kind of cattle, etc.).
- خربة صاطا Khirbet Ṣaṭâ (?).
- نحلة Naḥleh, bee. [*Nakleh*, palm-tree.]
- ريمون Reïmûn (?).
- ساكبة Sâkibeh, poured out, flowing (fem.).
- تل الحداد Tell al Haddâd, the mound of the blacksmith. [But it is probably a proper name, cf. "Hadad the Edomite," 1 Kings xi. 14.]
- تل العاصي Tell al 'Aâsy, the mound of the rebel.
- خربة قجاجة Khirbet Kaḡâzeh (?).
- قرية همّا Karyet Hamtâ (?).
- تل ذهرة المقتال Tell Dhahret al maḡtâl, the hill of the summit of the maḡtal. (مقتل *maḡtal*, slaughter.)

وادي الرميم Wad(y) al Remîm, see above.

وادي الصلاحي Wad(y) as Ṣalâhy, derived from Ṣalâḥ, good condition.

خربة الفوار Khirbet al Fawâr (*fuwâreh*, scum, froth; *fawwâr*, bubbling, spouting; *fawwâreh*, fountain).

وادي العلافوي Wad(y) al 'Alâfawy (?),

جبل ذي Jebel dzi (?).

جبل ميسرة Jebel Meîṣareh (perhaps ميسرة facility, prosperity).

مرج العرضه Merj al 'Ardheh, meadow of the Ardheh (?).

مرج الصوالحه Merj as Ṣawâliḥeh (from Ṣalîḥ, good).

خربة مشرافه Khirbet Mashrâfeh, the ruin of Meshrafeh (perhaps "eminence").

جلعود Jalâûd (derived from جلد جلد prostrate, or جلد جلد hard, strong).

خربة راجب Khirbet Râjib (perhaps n. prop. derived from رَجَب = one who is afraid, ashamed, or respectful.) [Probably خربة راقب "the ruin of the observer," cf. *El markab*, see above.]

خربة علان Khirbet âlân (*ilân*, manifestation).

جبل ام جوده Jebel Umm Jûdeh (mother of goodness).

تل الرض Tell ar rabdh, *rabadh*, a lair; *ribdh*, a herd.

الأعقد Al Ââkad, the knotty.

هيمشة الشمالية Hîshet ash Shamîliyeh (*heîshesh*, a tumultuous assembly; *heîsh*, dirt; *shemal*, left, northern.)

ابو نصير Abû Nuṣeîr, diminutive of Nasr. [*Abu Nuseir* is the name of an Arab Sheikh in the East of Jordan district.]



- مُوبَاس Mûbâs (?) [Mûbas.]
- رِجْم المَقْتَاه Rijm al Maktâh (?).
- ضَهْرَة أَشْبِيل Dhahret Âshbîl (?) (سَبِيل a lion's cub).
- وَاد(ي) الشَّلِيحِي Wad(y) ash Shaleihy (?).
- ثَغْرَة اُمِّ غَفْرَة Thoghret Umm Ghafreh, the defile of the mother of Ghafreh. (عَفْرَة young of the ibex (wild goat). Perhaps *ghafireh*, of the hairy (hirsute) one (fem.).
- ضَهْرَة أَصْنَامَة Dhahret Âṣnâmeḥ (صَنَم idol, pl. أصنام).
- خَرْبَة المَصْطَبَة Khirbet al Maṣṭabeh (*Miṣṭabeh*, a stone bench).
- عَيْن اُمِّ رَبِيع 'Ain Umm Rabî'a (spring, or the two spring months).
- خَرْبَة المَزَار Khirbet al Mazâr (the ruin of the Mezar, *i.e.* place which is visited, as for instance, the tomb of a sheikh or santon).
- وَاد(ي) الجُثَّة Wad(y) al Juththeh, the wady of the corpse.
- وَاد(ي) الغَزَال Wad(y) al Ghazâl, the valley of the Gazelle.
- المَجْدَل Al Mejdél.
- جَبَل العُشّ Jebel al 'Ushsh (nest).
- جَبَل هُوشَع Jebel Hûshâ (?).
- جَبَل مَيْسَرَة Jebel Meîṣereḥ, see جَبَل مَيْسَرَة.
- جَرَش Jarash.
- الْعِمَامَة Al 'imâmeh (imameh), the turban.
- خَرْبَة دَابِّن Khirbet Dabîn (دَبْن fold).
- خَرْبَة نَجِيب Khirbet Najib (honourable, generous).
- قَلْعَة السَّلْط Kalât as Ṣalt, the fortress of.

أم عيبرة Umm 'Abharah, see above.

قَرِيعة Karei'ah (Kari'ah), the best part, portion.

خربة الفحص Khirbet al Faḥṣ (of investigation), but *faḥṣ* signifies also an inhabited place.

خربة دجاجة Khirbet dajājah (of the hen).

بركة العمود Birket al 'Amûd, pool of the column.

الحمود Alhamûd (the praised, praiseworthy).

الرحا Arrahâ, the hand-mill.

شجرة الحلباطي Shajret al Ḥalabâty (*ḥulabîteh*, a hundred or more camels, etc.).

أبو طينة Âbû Tibneh (father of intelligence).

واد(ي) الحور Wad(y) al Ḥor (bottom, depth). حور white poplar.

اليزيدية Al Yazîdiyyeh (Yazîdiyyeh), the place or country of Yezîdiyyeh.

خنازير Khanâzîr, swine.

الجيعة Aljî'ah, the arrival.

الباقعة Al (بَقْعَة or بَقَاع) bakâa (a wide tract of land).

[A tract of land between two mountains; this answers to our word "valley," *wady* signifying rather a dry watercourse.]

المراميد Almarâmid (perhaps connected with رَمَاد — رَمَد ashes). مَرَمَد a place of ashes).

خربة الباشا Khirbet al bâshâ, the Pasha's ruin.

طلوز Talûz (?).

شجرة المؤمن Shejret al Mûmin, al Mûmin (?).

- وَادِ الدَّنَانِيرِ Wad(y) Umm ad denânîr, the Wady abounding in dinârs (a gold coin).
- وَادِ الصَّلَاحِيِّ Wad(y) aş şulâihy (perhaps *Suleihy*) derived from صَلَاح or صَلِيح good.
- بَاب صَفُوت Bâb Şafût (؟), صِفَتْ large, robust, fleshy, victorious.
- تَلُّ الرِّشْدِيَّةِ Tell ar Rashîdiyyeh, the hill of the Rashîdiyyeh (؟).
- رَقَّةٌ عِيَالِ عَلِيَا Rakket Ayâl Alaya (according to the dragoman's pronunciation). رَقَّة is a tract of land along a river, exposed to inundation ; عِيَال household, the people of Alayâ.
- عُشَّ غُرَابٍ 'Ush Ghurâb, the ravens-nest.
- أَطْوِيلُ الْغُرَبَانِ Âtweil (according to dragoman's pronunciation) al Ghirbân, I cannot make out the meaning of âtweil ; ghirbân=ravens.
- خَرْبَةُ سَمْرَاءَ Khirbet Samrâ, the brown ruin.
- مَيْدَانُ الْعَبْدِ Meidân al 'Abd, the plain of the servant (slave).
- خَرْبَةُ أَنْوَايْمَه Khirbet Anwâimeh, the ruin of Enwaimeh (؟).
- تَلُّ الْعَلَّاقِ Tell al 'Alâik, the hill of 'Alâik (camels sent to carry corn).
- عَقْبَةُ بَيْتِ جَبْرِ 'Akabet baît Jab'r, the steep descent of baît Jabr'.
- خَرْبَةُ الْقَبُونِ Khirbet al Qabûn, the ruin of Qâbûn (Qaḡûn ?).
- قَنَايَةُ الْمَفْجَرِ Kanâyet al Mafjar. مَفْجَرٌ a canal ; قَنَاة a place where water runs down.
- خَرْبَةُ أُمِّ غَفِيرٍ Khirbet Umm Ghafîr, the ruin of the mother of Ghafîr (i.e. the protector or escort).
- مَقَامُ عَلِيِّ بْنِ طَالِبٍ Makâm Ali 'bn Tâlib, the station of Ali Ibn Tâlib.

قَلْعَةُ الرَّبْدِ Kalât ar Rabd (perhaps الرَّبْدُ cliff), the fortress of the cliff.

قَصْرُ الْيَهُودِ Kaşr al Yahûd, the castle of the Jew.

تَلُّ نَصْبِ الْمَطَالِجِ Tell naşb al Muţâlî'y, the hill of the sign (post) of the observer. [The mound of the stone erected upon the look-outs or beacons.

مَطَالُ مَجَارِ الزَّيْتِ Maţâl Mejâr az Zeit. *Mejar* (مَجَار sale), if not *matjar* (مَتَجَر merchandize); *zeit*, olive-oil; but I can make nothing of *maţâl*.

وَادٍ مَقْقُوقِ Wâdy Makûk (?).

وَادٍ أَلْأَبْيَضِ Wâdy 'lâbyadh, the white Wâdy.

شَجَرَةُ الْأَرَاكَةِ Shajret al Arâkah, a species of prickly tree.

وَادِ ابْنِ التَّلُّوْلِ (وَادِي أَبُو (أَبِي) التَّلُّوْلِ) Wady Abû 't Tulûl, (father of the hills).

طَلْعَةُ الزَّرْعَةِ Talât az Zârah. طَلْعَةُ a speech, face [gully]; زَعْرَةُ the meaning of unknown to me. [Perhaps زَعْرُوط (vulgar for زَعْرُور) "hawthorn."]

طَلْعَةُ التُّرْكِيِّ Talât at Turki, aspect, face [gully] of the Turk.

وَادِي بَقَرِ Wady Baqar, the Wady of the cows; *baqar* is also a proper name.

وَادِي الْمَصْلَايَةِ Wadi 'l maşlâyeh (?).

وَادِي أَنْقُورِ الذِّئْبِ Wadi Unkûri 'l Dîb, The Wady of the pit (hole) of the wolf. *Unkûr*, a small pit like a dimple.

وَادِي الْبَقِيلَاتِ Wady 'l Bakîlât, the Wady of vegetables (بَقِيلَات).

خَرْبَةُ الطَّرُونِي Khirbet aţ turûni. According to Captain Warren, *Oktrûneh*.

وَادِي الْمُصِيرَةِ Wady 'l Muşîreh (?).

- خِرْبَةُ الْعُجَّاءَ Khirbet al 'Aûjâ, the ruin of El 'Auja (the crooked).  
 مَطَالُ الذِّئْبِ Maṭâl ad Dîb. (*Dîb*, a wolf.)  
 عَيْنُ أَبِي الدَّرَجِ 'Ain Abu 'ddaraj, the spring of the father of the stairs. [*Abu* = "abounding in."]  
 عَيْنُ أَبِي الْحَفَايِرِ 'Ain Abu 'l Hafâir, the spring of the father of the ditches.  
 طَلْعَةُ قُرْزَلِيَّةٍ Talât Kurzeliyeh (?). Perhaps قُرْزَلِيَّةٍ  
 وَادِي قَرْنِ صَرْطَابَةِ Wadi Karn Şarṭâbeh, the Wady of the horn of Şarṭâbeh (?).  
 نَقِيرُ حُرِّيَّةٍ Naḳîr Horriyeh, the foss of liberty (?).  
 سَدِّ حَرِيزٍ Sadd Harîz, the guarded mountain (?).  
 طَلْعَةُ عَمْرَةَ Talât 'Amreh. عَمْرَةَ any covering of the head; a small pearl. [Proper name, Amorite.]  
 طَلْعَةُ الْمُصْطَارَةِ Talât al Muşṭâreh. مُصْطَارٌ wine (?).  
 وَادِي الْقَنَاطِرِ Wady 'l Kanâtîr, the Wady of the arches.  
 جَوْثَةُ زَبَلٍ Jaûket Zibl, the dung heap.  
 نَصَبُ الْعَسَلَا Naşb al 'Aslâ, the sign (post) (statue), perhaps of the عَصَلَا (*asla*), the lean (thin) (woman).  
 بَصْتِ حَضِيرَاكِ الْعِيُوشِ Başt Ḥadhîrâk al 'Uyûsh. (The transcription of this appears to be faulty).  
 قَبْرُ الطَّرِقِ Kabr atṭurḳ, the Tomb of the *ṭurḳ*, perhaps *ṭuruk*, the roads, if not طَارِق *ṭarîḳ*, the diviner [or benighted traveller].  
 تَلُّ الْمَنَارَةِ Tell al Menâreh, the hill of the minaret.  
 الْقَنَارَةُ Al Kanâtîreh, the arches.  
 مَغَارَةُ أُمِّ أَبِي الْقُصُوصِ Maghârat Umm Abu 'l Fuşuş, the cave of the father of the gems (or of the cloves of garlic).



ولي عبد القادر Wali 'Abd al Kâder, the sepulchral monument of  
Abd al Kâder.

جلافة Jalâfeh. *Julâf* means mud.

خربة أجاور Khirbet Ajâwer(?).

جبعة Jabâa (?).

بيت اعتاب Baït Ââtâb. *Baït*, house; عَتَبَ step.

صناصين Ṣanâṣîn (?).

جمرين Jamrîn (?).

خربة العروق Khirbet al 'Urûk, the ruin of the roots. According  
to Captain Warren it is العَرُوبُ *al 'arûb*, which  
would signify the beloved or loving (wife).

خربة جالة Khirbet Jâleh (?).

باقار بَقَار Baqâr. بَقَّار *bâqqar*, the owner of (or dealer  
in) cattle.

بيت حجار (بَيْتُ حَجَّارٍ or بَيْتُ حِجَارٍ) Baït Hîjâr (baït  
Hajjâr), the house of stones, or of the stone-  
cutter (*fajâr*, according to Captain Warren);  
perhaps *fakhhâr* (فَخَّار), potter.

خربة قَصِير Khirbet Kuṣaïr, the ruin of the little castle.

خربة الْحَبِيلَة Khirbet al ḥabaïleh (habileh), the ruin of Ha-  
beïleh, ropes (?).

بيت سقارية (بَيْتُ زَكَرِيَّا) House of Zechariah [?]

سوقية شُوَيْقَة Shûwaïkeh. perhaps

جبل ركنادة Jabl Raknâdeh (?).

جبل الحبون Jabl al Ḥabûn (*Abûn*, according to Captain  
Warren).

عَقْبَةُ عَابِدِ 'Akabet 'Aâbid, the steep descent of 'Aâbid = devotee.

وَادِي خِلَّةِ الْعَصَافِيرِ Wady khillat (khullat al 'Asâfir), Wady of the friend (masc. and fem.), or of the tree (a prickly one), or the desert of the sparrows.

شَعْب دُقْمَاكْ Shâb Dukmâk, the mountain-path of Dukmâk.

ثَغْرَةُ الْفَجَّانِ Thograt al finjân, the defile of the coffee-cup.

قَاعَةُ الزَّيْتُونَةِ Kâat az zaïtûneh, the plain of the olive-tree.

خِلَّةُ الْعَيْسَاءِ (or خَلْوَةٌ) Khillat al 'Aïseh; perhaps the friend (waste or solitude) of the locust (fem.), or of the fawn-coloured camel.—v. No. 67.

رَأْسُ صَلَاحِ Râs Şalâh, the head (summit) of Salâh (goodness or integrity).

رَأْسُ الْمَطْلَعِ Râs al Maṭlâ, the head (top) of the ascent.

بَطْنُ الْمَعْطِي Baṭn al Môṭi (the belly of the giving) (?). [بطن = the bottom of a Wady.]

خَرِبَةُ شَوْاحَةِ Khirbat Shûwâḥah (شَوْحَةٌ Shûḥah, perhaps kite) (?).

ضَهْرَةُ حَسَّانِ (ظَهْرَةٌ) Dhahrat (Dzharat Ḥasân), the summit or ridge of Ḥasân.

قَرْيَةُ الْكَبُو Karyat Alkabû, the village of Alkabû. [Perhaps "gate." قبو]

وَادِي أَبِي بُكَيْرٍ Wâdy Âbû Bukair (?).

قَرْيَةُ سَعِيدَةٍ Karyat Saïdeh, the village of Saideh.

خَرِبَةُ الْلُوزِ Khirbat al Lûz, the ruin of the almond (-trees).

قَرْيَةُ صُوبَةٍ Karyat Soba. Soba in Arabic means a bitter plant, also a heap, a store, etc.

وَادِ نَحَالِينَ Wādī Naḥālīn (?).

عَيْنُ فَارِسِ 'Ain fâris, the spring of the rider.

ظَهْرَةُ الْبَغْلِ (ظَهْرَةُ الْبَغْلِ) Dzahrât al Baghl, the back (ridge) of the mule.

ثَغْرَةُ حَمَادِ Thoghrat Ḥamâd, perhaps *ḥumâd*, the defile of Hamâd. [*Ḥamâd* in the Bedawî dialect means "gravel covered with flints."]

خِلَّتِ الْمُسْتَعْصِي probably الْكَسْتَعْصِي Khillet al Mustâṣî, the waste, etc., of the rebel.

وَادِ الشَّامِيِّ وَادِ الشَّامِيّ Wady ash shâmî, the Wady of the Syrian, or perhaps for الشَّامِيّ the high.

ظَهْرَةُ الْأَفْطَحِ Dzahrât al Âḩṩâ, the back (ridge) of the maimed one.

مَرَاḩِ الْجَامِعِ Marâḩ al Jâmiâ (of the mosque). *Marâḩ*, place whence and whither people go in the evening; *Murâḩ*, night-quarters of camels and cattle.

نَبِيِّ دَانِيَالٍ (نَبِيِّ دَانِيَالٍ) Nabi Dâniâl, the (tomb of the) Prophet Daniel.

وَادِ الْبَجَاجِلَةِ Wady el Bajâjaleh, the Wady of Baït Jâla (or of the people of Bait Jâla) (?).

خِلَّتِ الصَّنِيعِ Khillat as Ṣaniâ, perhaps the waste (solitude) of the صَنِيعِ (industrious), or صَانِعِ (artist).

وَادِ بَيْرِ الصَّلِيبِ (وَادِ بَيْرِ الصَّلِيبِ) Wady bir as Ṣalîb, the Wady of the well of the Cross.

أَبُو سُودِ Âbû Sûd, father of blacks (negroes); or of dominion; or perhaps سُعُودِ (felicity, and nom. prop.); or سَعْدُ an aromatic plant.

خربة كَبَّار Khirbet Kebbâr (ruin of). Perhaps *kubbâr*, vulg.  
for كَبَر (*kabar*) the caper plant, or "the great  
man."

CONCLUDING REMARK.—The nomenclature given above is exceedingly doubtful; my remarks are mere suggestions, which may lead to sounder conjectures. Had I been able to take down the names on the spot I might have been more successful, but as the mere interpreter "*multa possum nescisse*."

JERUSALEM, Nov. 22, 1867.

CHS. SANDREZCKI.

THE  
PALESTINE EXPLORATION FUND.

---

PREFACE.

It is with great pleasure that the Committee are able to inform Subscribers to the Fund that they have received from Palestine three completely filled in tracings, the first contribution to the new map of the Holy Land. The work has been shown to Captain Stewart, who first commenced the survey, to Captain Wilson, and to others experienced in survey work. All are unanimous in expressing their entire approval. It is a piece of work which reflects the highest credit on the non-commissioned officers, Sergeant Black and Corporal Armstrong, to whom it is mainly due. It must be understood that the work of reducing observations taken in the field is a long and laborious one, and that the three sheets already received represent but a very small amount of the actual portion of country surveyed. The amount now plotted, as Lieutenant Conder informs us, is 560 square miles. He calls attention to the fact that the work has been done by two men only, that what they have done would have been impossible had it not been for the care, assistance, and experience of Mr. Tyrwhitt Drake, to whom our best thanks are due, and that more men are urgently needed.

Having once begun this work, which we are doing not for ourselves or our own generation only, but for all the world and future ages, it must be done thoroughly, and should be done expeditiously. The Committee are quite sure that they may depend upon the exertions of their friends to increase their funds and enable them to give Lieutenant Conder the additional men he asks for. It may be remembered that Captain Stewart was also urgent in his appeal for a larger staff.

The Hamath inscriptions have been attracting the attention



of scholars. The rough illustration accompanying this number shows a proposed reconstruction by the Rev. Dunbar Heath, from a comparison of Captain Burton's tracings and our own photographs, of the inscriptions on three stones. The plate is kindly presented to the Committee by Mr. Heath, and is here given as a possible help to students of these very curious inscriptions. Besides stones at Hamath, there are nine seals in the British Museum thus inscribed, and a half-defaced stone of Aleppo has been found by Mr. Drake inscribed in similar characters.

In the next *Quarterly Statement* the Committee hope to be able to bring before their Subscribers a definite plan with regard to their future work in Jerusalem itself.

The letters of Lieutenant Conder give some account of what is now known as "Shapira's collection." It is a collection of rough figures in pottery, with occasional fragments of inscriptions, masks, broken utensils, and other things. They are said to be brought from Moab. Unfortunately, it is impossible for experts to decide on their authenticity till they can be examined and handled. The sketches sent home by Mr. Tyrwhitt Drake and Lieutenant Conder are lying in the office of the Fund, where they can be seen. Undoubtedly, if they prove to be genuine, they will be very curious and valuable.

---

## THE SURVEY OF PALESTINE.

---

LETTERS FROM LIEUT. CLAUDE R. CONDER, R.E.

L.

10th July, 1872.

First impressions on arriving in a country so totally unlike any in Europe as is Palestine, must always be more or less interesting.

Two kinds of travellers have given such descriptions, and they are apparently very contradictory. The first kind are enraptured by the scene, and describe in flowing language blue hills, venerable cities, orange groves, and palms. The second, disgusted with everything they meet, talk only of deserted ruins, hovels, parched shapeless hills, dirt, and dust. The truth of the matter is that there is much to be said on both sides of the question. Palestine at present is emphatically a land of promise. The distant scene from a window in Jaffa—long garden, groves, palms, plains covered with vegetation, and distant misty mountains—quite comes up to such expectations as are raised in our infancy by the sketches of Roberts and Bartlett; descending, however, into the details when distance no longer lends enchantment, the promise cannot be said to be well fulfilled. The venerable town proves dusty, noisome, and hot to an insufferable degree, the plains flat and uninteresting, and the hills shapeless and burnt up. The truth is that for distant views Palestine is indeed beautiful, but for stern realities in the foreground it is barren and commonplace to an unusual extent.

Having safely landed through the high waves and the narrow inlet of the dangerous reef at Jaffa, the road lies through the plains to Ramleh by a road once well made but so neglected as to be worn to its very foundation of large stones. The Arab horses, with their rapid walk and easy canter, are now the only means of travelling; the omnibuses and carriages started some few years ago in the days of the American colony at Jaffa being now broken or sold, and the road impracticable.

In the evening we reach Ramleh, which is quite typical of most of the Syrian towns and villages. The first thing which specially strikes the eye in these buildings is their ruinous appearance when seen close. This is due to several causes—first, their colour, which is most peculiar; not white, as in Italy or Alexandria, but simply dust-coloured, as if dust, such as that on an English road, had been scattered over the whole and over every patch of soil in the roads, streets, and country, which is not covered with some sort of vegetation. The second cause is the crumbling and uneven dressing of the limestone of which the

walls are formed. The third, to an English eye, is the want of any relief from difference of colour in the roof or windows, which, with the white flat concrete roofs, is continually characteristic. The last, and perhaps most important cause, is, that as in the ancient times of megalithic structures, so in modern buildings, the inhabitants of Palestine seem to be quite unacquainted with or to have a profound contempt for the right angle; as in the grand Haram enclosure, so in every Syrian house, there is rarely any attempt at squareness. The roofs are at all levels, the walls often not strictly parallel, and little round domes crop up without any attempt at symmetry or proportion. Each house, unlike an Italian or Alexandrine building, has its flat roof surrounded by a parapet wall, which runs along at various levels and always appears to be ruined, in some parts two or three courses wanting. Such, with additions of a few minarets, scattered palms, and cactus straggling in and out of drystone enclosures, is the outside of a city in Palestine. In the distance it presents a compact square mass of building; in the interior, streets paved in parts with small stones and arched over for shade, going up and down by steps, with small shops and covered bazaars.

After leaving Ramleh by starlight, with an occasional view of gleaming eyes from some wild dog or hyena, the mountains are reached just as day begins to dawn. They are certainly disappointing. They are round and shapeless, of stratified limestone with brown bands of burnt herbage visible between; and only when some special effect of light or broad shadow is visible, can they be said to look at all picturesque. In some parts the limestone, usually dark grey, has a purpler tone, and the yellow grass contrasts with it; in others the olives, of a brighter green than those in Europe, with aged boles hollowed and ragged, give a little freshness to the view. When, however, these relieving features are absent, the scene is barren and desolate in the extreme; no human habitation or sign of agriculture is visible, a few partridges and small birds appear now and then, and birds of prey, owls, hawks, kites, and other wild inhabitants of the desert, are seen sailing in amongst the confused succession of round summits separated by deep dry valleys and the road runs up and down as mountain succeeds mountain in wearisome succession; and as you gallop to each eminence in hopes at least to see the distant city of Jerusalem, your view is barred by yet another brown hummock to be traversed with pain and discomfort.

Two coffee-shops are promised us on the way; each is found in a valley by a stagnant muddy well, each equally disappointing, as it consists merely of a semicircle of dry stone wall, some two feet high, with a low roof of boughs supported on a central pole, and half covered with dry brushwood. Here coffee is served by an aged and dirty Arab, and mules and horses crowd, tortured by flies and gnats, round the well.

At length we are told that from the next summit we shall at last see Jerusalem. What, when it proved such an acceptable announcement to us, who had only travelled nine hours, and had fed by the way,

must it have been to the crusaders who, in hunger and thirst, under a burning sun, had struggled through half Europe and all Asia Minor and Syria on foot to reach it? Little can those who most sneer at this "centre of the world" wonder at the tears and cries of the multitude when they at last beheld their goal.

Nothing was more contrary to expectation than the first view; not of a large city walled round, lying spread out below us, but of a few white modern houses, drystone walls, and a large building with several white domes, evidently also quite new; and all this, not in a valley, but on the very top of the last summit ascended. This was modern Jerusalem, the Russian town. We gallop on, and at last on the same long ridge, but sloping down towards a distant valley, we see a long dark grey wall with battlements, and two square towers; minarets and tall cypresses rising behind, and in front of the dark gateway yellow camels in the blazing sun, lying grunting and grumbling in the road. Such is the foreground, but it forms, not as one would be led to expect and believe, the whole scene, but merely the setting of the extreme distance of a long veil of grey mountains—the Moab country. It is not, indeed, till visiting the spot that the traveller appreciates the meaning of the Psalmist's words; for twenty miles he has struggled over mountains, and now he sees on every side to the extreme verge of the horizon still higher hills, and yet finds himself standing on one of these at the gate of Jerusalem.

Captain Burton, in the general remarks prefacing his new work on Syria, speaks with great contempt of the "torpid little town of Jebus;" yet to the traveller fresh to Syria, although well acquainted with the beauties of mountain scenery in Upper Italy, and the rich plains of the South, and not even suffering from "Holy Land on the brain," the first impression is decidedly a striking one.

Let like be compared with like, and not with that which is incommensurate. Compare Jerusalem with Paris or London, compare the Moab chain with Mont Blanc, the result will naturally be unfavourable to scenery which is on a smaller scale; but when, after seeing the shapeless and half-ruined villages near Jaffa, the well-built walls, the fine buildings, the battlements, archways, pillars, palms, and gardens of the capital strike the eye, the effect is certainly superior in beauty to moderate expectations. And again, when the brown hills passed through still meet the eye on the north, the distant range of Moab looks imposing by contrast; and again the truth of the assertion that the charm of Palestine consists in distant scenery is proved.

Another point which in England appeared of great difficulty now disappears entirely as such. It is evident that Palestine is not a land where architecture has ever reached any great amount of excellence in detail, or richness of style. Hence it is that the apparently homely outline of the ancient Temple, as blocked out from the Talmud description, and the plain character of the remains as yet found, are still not inconsistent with the enthusiastic accounts of Josephus.

*Size* was to the Jews, whose ordinary buildings were small and insignificant, the only element of grandeur, and in this, indeed, they excelled. The effect of even such small towers as these at the Jaffa Gate is striking; what then must have been that of the lofty piles of Hippicus, Psephinus, and Mariamne, and the great wall of the Haram, of which now but a third of the height is visible?

Beauty of detail and richness of style we should not naturally expect in Palestine, but grandeur in proportion and square massiveness we should look for and do find.

## II.

11th July, 1872.

My second day in Jerusalem was spent in the shop of Mr. Shapira, in Christian Street, sketching the pottery alleged to have been recently discovered from Moab and which he has offered to the Palestine Exploration Fund for examination. These are most interesting to Bible and archæological students, and appear to be, in many instances, unique. They are of two kinds of pottery, one bright red and sharply defined in outline and inscription; the other, apparently older, is of greyer colour and less distinctly moulded.

The sketches I send are the only ones which time enabled me to prepare for this mail, but the number as yet uncommunicated by either Mr. Drake or Dr. Chaplin is very large, and these will be forwarded as soon as possible, my time being principally devoted to such drawing for the next few days.

First in interest to the general public is the "Moab Calf." Here, if genuine, we have a relic which may at once take us back to the Mosaic Dispensation, to that mysterious worship which—perhaps first connected with or in imitation of the Egyptian Apis—seems to have had peculiar attraction for the Jews. Hardly had they left Egypt when under Sinai itself they worshipped the golden calf, and later we find that Jeroboam caused Israel to sin by the erection and worship of calf idols in Bethel and Dan. It is a curious, but perhaps impertinent remark, that twelve oxen supported the brazen sea, and that the bull was one of the four beasts or portions of the Cherubim.

To find therefore in Moab, the country where first Israel, issuing from the desert, was led astray, one calf idol and the fragment of a second, would be most interesting, and the rumour that similar relics, but of gold, have been unfortunately already melted down in Damascus, still further excites the curiosity of the student.

The Moab calf is perfect, all but the feet on the right side. It is 22½ in. long, 9 in. broad, and 8¾ in. high, or rather less than the dimensions of a new-born ordinary calf. Its ears are chipped, and it has on its



sides scratches which might be conjectured to be the remains of an inscription, but may only be marks of the moulding tool. The head is well-shaped, and the dewlap well executed; the rest is clumsy and rough in the extreme; the hollow in the back may be either for incense or for the reception of offerings, and is of irregular shape. The colour of the pottery is light, and in parts grey; the nostrils are shallowly moulded, and not perforated as in the second or fragmentary head, which is also better moulded and of thinner pottery. No really marked inscription exists on either.

The remaining sketches carry back our thoughts at once to the eleventh chapter of 1st Kings, where it is told us how Solomon erected on Olivet temples to Chemosh, the abomination of Moab; and for Molech, the abomination of the children of Ammon; and for Ashtoreth, the goddess of the Zidonians.\*

---

### III.

#### ON THE EXPLORATION OF JERUSALEM—THE SECOND WALL.

NABLOUS, 18th July, 1872. 1

Much as has been done in elucidating the topography of Jerusalem by my predecessors, I feel, after a long talk with Herr Konrad Schick, in charge of the excavations in the Muristan, that there will soon be opportunities for still more decisive discoveries on the subject.

These opportunities should not be lost, and I sincerely hope that, as in next November work will be possible here without affecting the health of the party, the Committee of the Palestine Exploration Society will feel justified in supplying men, materials, and money; whilst I would guarantee that the support and assistance necessary for success are to be readily obtained here.

First in interest to us all, comes the vexed question of the Second Wall, including that of the identity of the traditional site of the Holy Sepulchre, with that new tomb in the garden which was nigh at hand to Calvary.

Calvary, as all agree, was without the then existing city wall, which by Josephus is always spoken of as the second wall. If, then, the wall ran east of the present church, the evidence is permissive, though not positive, but if it ran west, the evidence becomes definitely negative as to the authenticity of the site.

The description Josephus gives (*B. J.* v. 4) is bare enough. The wall

\* These sketches, together with some by Mr. Tyrwhitt Drake, are lying in the office of the Fund. It is not yet by any means certain that the objects are genuine, but it is hoped that further investigations may confirm the good opinion of them formed both by Mr. Drake and Mr. Conder.

started from the gate Gennath, or, as it has been translated, the garden gate, belonging to the first wall; it encompassed the north quarter of the city, and reached to Antonia. We have, however, another indication of its extent in the same passage; for, supposing the distance of every tower on each of the three walls to be the same, and comparing thus the lengths of the walls, we find that the second wall was two-thirds the length of the first, and four-ninths that of the third, and coupling this with the thirty-three furlongs given as the circumference of the city, the length of the second wall is roughly one English mile.

Of local indications we have but one of any value, at the Damascus Gate, where two ancient towers are found. This, then, must surely be a gateway of the wall in question, for it is too far north to belong to the first wall, and, if the circumference of the city be kept in view, too far south to have been in the third.

From this starting-point, then, we might trace the wall to Antonia on one side, and to the Gennath Gate on the other. The first question, as being of less immediate interest, and also more difficult to solve in accordance with all the different points of evidence, I leave at present untouched. One of two courses, it must, as is generally agreed, have taken; and I shall therefore merely remark that the greater the extent on this side, the less is left to be accounted for; and thus the greater the probability of so tracing the wall as to exclude the church of the Holy Sepulchre.

We come, then, at once to the question of the junction of the first and second wall; and here it is important first to determine the line of the first wall itself.

On this, in the same chapter, Josephus is fortunately more definite in his description. The northern course was from the tower Hippicus, which, with Phasaelus and Mariamne, was placed on this side. Hippicus we also *infer* to have been at the north-west corner of the wall, as from it the course to the west cloister of the temple is described. From this salient point the third wall also started. Phasaelus and Mariamne must then have been east of it; and to them we are told that the King's palace adjoined. The wall hence ran on to the Xystus, the council-house, and the west temple cloister, excluding the lower city which was separated by a valley.

But little difference of opinion exists, therefore, about the course of this wall, which is supposed to lie in the line shown. With regard to its history I have never seen it remarked that it may probably be identical with the wall which Simon and Jonathan, the Asamoneans, first built in the midst of the city, to exclude the market-place from the garrison, which was in the citadel on Acra, which was afterwards levelled (*Ant.* xiii. v. 6).

Of local indications there are very few. On the west, at the Jaffa Gate, stands the citadel of the present town, including the castle of David, a tower the foundations of which are undoubtedly ancient, and agree with the dimensions given by Josephus for Phasaelus. On the east, at

Wilson's arch, it is possible the wall ran close to the vaulted ascent. Between these two points in the same line stands the property of the Society for Converting the Jews; and here, as shown on a larger plan, Captain Warren sought to find, beneath an archway, the Gennath Gate. A second ancient gate exists close by further west, but its date is uncertain, and part of it seems Christian. In the same vicinity an old tower-like cistern exists, and part of an ancient wall below the surface, all pointing to the existence of the wall, probably under the street.

Having thus a tentative east and west line, we require one north and south to fix the position of the Gennath Gate; but it is just here that the difficulty lies. Captain Warren on the east went forty feet deep without finding either the rock or the gate; and Captain Wilson was equally unsuccessful at Kalaat el Jalûd, on the west of the Holy Sepulchre, which Dr. Robinson had taken as a point in his second wall.

The scattered references to the wall in question in Josephus are numerous, but tend, it would seem, rather to trace the wall so as to include the Holy Sepulchre; though the evidence cannot be considered as conclusive.

First we learn (*B. J.* v. 6) that Titus thought to attack at the monument of the High Priest John, as the outer wall was lower, the second wall not joined on, not being completed, and there was an easy passage to the third or inner wall.

A sally from an obscure gate (or postern) at Hippicus was directed against this attack by the Jews, who under Simon fortified the spot near John's monument as far as the gate where the water (probably the aqueduct) came in to the tower Hippicus (*B. J.* v. 7).

Titus, however, took the second wall at the part where the narrow streets led obliquely to it, and prepared to assault the last wall. For this purpose he erected banks at John's monument, and the pool Amygdalon, thirty cubits apart, in the north quarter (a term equivalent, it would seem from another passage, to the lower city). (*B. J.* v. 9, and v. 11.)

The deductions to be made from these passages seem to be as follows:—

1st. The second wall was at its junction, near the tower Hippicus, which is supposed to have been near the Jaffa Gate.

2nd. The postern of the aqueduct at Hippicus may possibly be identified with the Gennath Gate.

3rd. The pool Amygdalon, only mentioned after taking the second wall, must have been within it, close to the monument of John—a conspicuous object, which M. Ganneau boldly identifies with the Holy Sepulchre itself! The pool may, therefore, very well be that of Hezekiah which lies nearly north of the castle of David.

With regard to the opposite view of the subject, I may state that, east of the Holy Sepulchre, there are ruins of what was undoubtedly a tower or building of some sort belonging to the megalithic period, the rock not being here far below the surface; these are, in all probability, *in situ*. Captain Wilson thoroughly explored this.

First it is evident that the aqueduct should be carefully traced in hopes of finding both Hippicus and the Gennath Gate. To this work Herr Schick promises soon to devote himself. Secondly, it is important to descend into the lower part of the castle of David, which has, I understand, never been explored, and for the investigation of which it is hoped the new governor will give facilities. Thirdly, an arch in the moat of the citadel must be opened, and the vaults within searched, and if necessary a short gallery driven towards the south to find, if possible, the first wall.

---

#### IV.

##### THE PROGRESS OF THE SURVEY.

NABLOUS, 18th July, 1872.

Arriving on the 17th at Nablous, my first attention was directed to the examination of what had been done in the survey during the time that Mr. Drake has been in charge. Having before this date been unconnected with the work, I may of course be looked upon as an impartial critic; and on that ground I wish to report at once my impressions on joining.

Palestine has been described as an easy country to survey, the distances being large from one point of extensive view to another, and the amount of detail small. I wish, therefore, to give a short sketch of the practical difficulties of the work.

Our method is to establish a camp from which to extend the survey within a radius of five to seven miles; when this is finished the camp is removed some ten miles further and the same process repeated.

The size of the triangles is therefore limited, not by the distance that can be seen, but, as each point has to be revisited for the sake of connecting it with new ones afterwards erected, by the distance that can be ridden in the day, leaving the requisite amount of time for the observations to be taken.

When it is considered that in some parts no roads exist, that where they do they are used by the natives principally as receptacles for all the stones in the gardens; that all the surface from Jerusalem to Nablous is either covered with small stones or consists of flat limestone slabs worn quite slippery by sun and the feet of the camels; that no shade can be found on the hill-tops; that water is scarce in most parts; and that delicate instruments have to be mounted on mules which are urged as fast as circumstances permit—it will be seen that to construct an accurate map is not by any means an easy task.

For this task but two men have been employed, under the care of Mr. Drake, without whose experience and constant assistance they would have been unable to accomplish what they have done. They have

worked now unceasingly for six months, and the results are successful and satisfactory beyond what could have possibly been expected: in fact, better work could not be desired.

The extent of the Survey at present plotted is 560 square miles. Part of the most difficult country is already passed, and a considerable portion that is easy will be even more rapidly completed.

As regards the triangulation, the checks have been in all cases satisfactory; and lines of thirty miles in length are calculated throughout, which prevent all possibility of slewing. The direction taken will bring us in the shortest possible time to the second base on the plain of Esdraelon, which will still further check the work.

The observations have also been very satisfactory, and agree well with those taken by Captain Warren. Finally, the detail has been all filled in, and the work will be forwarded as soon as possible to England, and can be published at once. The hill shading is not placed on the plan, and as it rather tends to obscure the detail of roads and villages it would be better to add it later. It will, however, be continued in conjunction with the other work.

Perhaps the most satisfactory feature in the work is, however, yet to be mentioned. The amount done in the last quarter has been half as much again in quantity as that done in the first three months, and that in spite of the increased heat of the weather. It is hoped, also, that as the men get more accustomed to the work, to the hard riding, to the habits, language, and appearance of the country; and, further, when the plains and less difficult country are being surveyed, that still greater progress will be made.

I cannot, however, consider this report as complete without urging most strongly that more men be employed. Captain Stewart, I am aware, spoke on this point at the last general meeting; and I do not hesitate to state that, as at present carried on, it cannot be completed in the time expected. Two more men would more than double the rate at which work can be carried on, and it would be desirable to increase the party still further in order to lighten and accelerate the work. It is at present in a precarious state, for the illness of one of the men must necessarily put a stop to it, and although their health has as yet been very good, the risk is very great to run.

I would, therefore, press the committee earnestly to consider the saving in time and expense which the addition of two or three more men would make. They need not be of the rank of Sergeant Black or Corporal Armstrong; as younger men of the corps would, under the guidance of these excellent and experienced workmen, be quite efficient, and could be easily selected at Chatham. They should be men accustomed to filling in of detail, but need not be able to take observations.

My conclusions are, therefore, that considering the party and the country, the work is far more satisfactory than could have been hoped, and indeed for accuracy and detail leaves nothing to be desired; but I



consider that the addition of three more men at least to be sent out to arrive in October at the latest, is of the greatest possible importance.

---

## V.

### THE COUNTRY ROUND SAMARIA.

NABLOUS, 23rd July.

The Survey has, during the last quarter, been extended through the hill country of Palestine, until at last from our further points on the north we can see stretched in the distance the plain of Esdraelon, on which our second base is to be measured; with Nazareth, Tabor, and Hermon on the north, and the ridge of Carmel and the white sand cliffs of the Mediterranean stretching away on the north-west and west.

Our present camp is, and will probably for a week or more continue to be, at Nablous, the site of Shechem, the patrimony of Abraham, and the resting-place of Joseph; placed between Ebal and Gerizim, on the very watershed of the country, with hill country on every side, and deep wadys or valleys leading to the Jordan valley and the Mediterranean.

The country from Jerusalem and Hebron on the south, to Esdraelon on the north, presents such constantly recurring features, that a description of that in the Samaritan district will give a correct impression of the whole. Indeed, were it not for the distant views reaching beyond Jordan on the one hand, and to the sea on the other, including long ranges, broad plains, and distant blue ridges, the scenery would present a most monotonous and uninteresting recurrence of round-topped barren hills and deep stony valleys. Palestine is, as I have before remarked, the country of all others where distant effects can best be studied and appreciated.

The geological composition of the hills is a dark grey, sometimes almost purple, limestone, hard and compact, stratified in beds of an average thickness of two, three, to seven feet, and as a rule very nearly horizontal. These are referred by the French geologists to the early miocene or late cretaceous period, and called by them nummulitic.

Beneath this bed lies another, similar to that on the east of Jerusalem, a soft chalky soil containing a portion of alumina; in fact, approaching to a marl. The beds are much thicker, ranging from ten to fifteen feet, and in places beds of equal thickness of a flint conglomerate of dark colour are found, inter-stratified. The dip of this formation varies, but apparently the beds are not conformable with the upper limestone. A good view of the out-crop of a still lower bed is obtained at the head of Wady Farah, an important valley running to the Jordan on the east of Nablous. The chalk here is suddenly replaced by a secondary limestone, the beds contorted with a dip which probably in places exceeds 45°, and stratified in thinner beds of dark colour. The strike can be traced for many miles in a southern direction along the plain east of Nablous;

and a deep water-worn ravine on N.E. of the town has left on its west side a strip of the limestone, which fringes the softer and rounder outline of the chalk hill.

This third formation is a dolomitic or crystalline limestone, marked by narrow torrent beds, with natural caverns. The outline is sharper than that of the nummulitic limestone, which appears, however, to be the main feature in the landscape on the south.

The appearance of the country is what would be naturally expected from such formations. Round stony hills, hemmed in and divided by innumerable valleys, mostly narrow and nearly all dry; down these the winter torrents which first formed them flow to the plains, but in summer the water supply is limited to a few streams and to wells. The horizontal beds give a tame outline to the hills, and their only beauty consists in their colour towards evening or in early morning, when reds, bright browns, and yellows, with bluish and purplish shadows in the deep folds of the hills, give, with the distant dim mountains on the east, a striking though barren scene. Where soil exists not consisting of grey shingle from the rock, it is of a rich reddish colour, and it affords, as Captain Burton remarks, a valuable indication in searching for ruins, as the existence of this virgin soil is a distinct negative proof.

Between the ledges at this time of year (a time most unfavourable to the beauty of the scenery, as flowers and green leaves have long ago been parched, and only burnt grass remains) grow every species of thorny shrub, and plants delighting in dry barren sites. One low dark-brown thorny plant makes itself specially conspicuous, covering the hill-sides in moss-like patches on every side, contrasting forcibly with the yellow-burnt grass and the grey stone. Rock roses (*cisti*), lemon-scented thyme, and thistles also abound; and, like the remainder of the shrubs and plants, are dull grey and brown in colour. The summits are generally flat and covered with stones, often quite bare, and rarely possessing any trees. Lower, patches of maize, of cucumbers, and other vegetables, near the villages, and occasionally tobacco fields, give a greener hue to the hill-side, but in the general view these are lost, and the effect is brown, yellow, and grey.

Descending into the valleys the soil is even stonier, but in Wady Farah there is a stream of fresh water, and beside it dark bushes of juniper and clusters of large oleanders in blossom mark its course like a black broad line in the middle of the valley.

Where the chalk appears, the outlines are softer; and broad white patches and bands run over the mountains. The water has here worn down the hills, and plains of alluvial soil, such as that east of Nablous, result from the softer formation.

Near the villages and up the hillsides the olives give an appearance of greater fertility, though in colour they are grey and dry. Many are of great age, and split into several pieces, which flourish independently. The crop, with the small amount of cultivation it obtains, is biennial. The whole of the groves, to sunset or even after, resound with the extra-

ordinary creaking of the cicada, which sounds sometimes like mule bells, at others as if the whole ground was simmering in the heat.

In the midst of this barren and half-cultivated country the immediate neighbourhood of Nablous presents a marked contrast. Numerous springs and streams run from the weather-beaten scarps of Gerizim and the olive slopes of Ebal, towards the sea. The grey town, with its square houses, its underground streets, its solitary palm-tree, occupies the high valley between the two, and creeps up the side of the former. Around are fig gardens, olive groves, and cultivated plots of herbs, all presenting, as seen in the distance, a green and fertile extent of orchard. Good fruits of every kind, melon, prickly pear, plums, and grapes, abound, and a good harvest is now threshed by the primitive method, used, no doubt, in the time of the Patriarchs.

Such then, are the physical features of the country of Samaria. Of its *fauna* and *flora* but little can at this period of the year be learnt. The flowers are burnt and dead, whilst birds and beasts are alike few and uninteresting. Round the wells, the large herds of black long-eared goats are mixed with small sheep, also long-eared, and out of condition owing to the heat. Over the hills long strings of yellow or white camels, each led by a dark man, in his black kefiyeh, riding a diminutive donkey, are constantly met swinging along. Higher up a pair of gazelles may occasionally be seen bounding over the stones, and once we came across a family of wild pigs. Reptiles, however, enjoy the country and the weather, huge grey lizards scamper about with head and tail well lifted from the ground. Small ones, more resembling earthworms in appearance, also abound, and an occasional large-sized snake is to be met with on the hills.

Song birds seem entirely absent, and of the smaller birds only sparrows and a dark-coloured stonechat appear. In the clefts of the rocks little brown owls are perched, and over the deep wadys the Egyptian vulture is seen circling. Black crows, black kites, and other birds of prey are common; a black-headed jay is also often seen in the olive gardens. A flight of bee-eaters came over our camp this evening, and in the morning we saw a little woodpecker on the hills; these, however, are the only species as yet noticed, and as it is near moulting time it is not a favourable period for collection.

The insects alone remain to be noticed, and of these there is a marked absence of coleoptera, only two or three small beetles having been obtained. On the hills, and sometimes lower down, there are many butterflies, the large yellow swallowtail (*P. podalirius*), and both kinds of the small copper, are the most common; but a bright orange one, and another dark blue or black also, are found. Grasshoppers, the mantis, great yellow spiders, and scorpions, three or four inches long, and light-brown coloured, complete the list. It is remarkable that no *green* insects seem to exist here, but all seem suited to the colour of the country. In southern Italy, where vegetation is fresher and greener, lizards, grasshoppers, and beetles are all often bright green in colour.

Such is the summer aspect of Palestine, at least as far as the hill-country is concerned. Dry and parched, it presents, no doubt, at the present day an appearance very different from that which, with the hills covered with shrubs, with copses, and even with trees; the valleys, watered by fresh streams, bordered with grass and with foliage, it offered to the eyes of the Israelites, to whom, fresh from the barren deserts of Sinai and the rocks of Moab, it must have seemed to be indeed, at least by comparison, a land flowing with milk and honey.

---

## VI.

## ROCK INDICATIONS AT JERUSALEM.

CAMP JEBA, 18th August, 1872.

Having recently had occasion to visit Jerusalem for a week, to arrange stores, &c., Mr. Drake and I have occupied our time in explorations of various parts of the city and neighbourhood, and have been rewarded by the discovery of several points of interest, some of which have not, I imagine, been as yet brought before the public.

Our first object was the examination of the Haram, principally with regard to the tracing of rock on the platform itself, and the examination of the chambers on the south and west of the platform. The general result was an impression that much still remains to be done in the sacred precincts, which will throw light on the disputed topography of the interior.

Mr. Schick had just commenced the examination of Captain Warren's Tank No. 24, which lies under a square house used for storing tiles in. Here Captain Warren only remarks that the rock is at a depth of nine feet from the surface, sloping west at an angle of thirty degrees. Descending into it, we found that the rock, though irregular, and rising towards the east, forms the floor of the great part of the chamber. On the north side is a scarp, cut very distinctly, running to the east wall of the chamber, about one foot from the north wall, the interval being filled with dust and the rock foot not visible. (See Sketch I from the O. S.) The east wall also consists to a considerable height of a finely worked scarp of rock, which I suppose deceived Captain Warren, who took it for masonry; no joint, however, exists between it and the rough rock at its foot. The chamber is vaulted, with steps at its south side, and above these the same scarp is again visible. How far it extends southward there is no saying, but we have here indications of a corner of some kind, a sudden descent from a level about two or three feet below the platform to one of some ten feet. On the rough rocks there are marks as though of the remains of steps, or of masonry, fitted against the wall. The interest of this discovery is very great, and no doubt it will form a new point in future theories on the temple.

The sketch which I send will show the position with reference to the mosque, which is to the south-east of the spot. The line of scarp continued appears to cut the top of the steps from the gate above Wilson's arch. The north scarp is on the lower level, and finishes the rough rock; its junction with the eastern scarp is hidden by plaster on the wall. The higher, or eastern scarp, has a set back of about six inches, about two feet from the top of the rough rock. The neighbouring deep cistern should be examined, to see if it contains any indication of a continuation of this scarp.

The distance, taking the middle of the Sakhras as a centre, is nearly equal from the south wall of the platform, and from this scarp on the north. This again may be an indication of the platform not having originally extended so far on the north as it now does.

Entering the mosque itself (an impressive and most interesting interior, with its glorious windows and brilliant mosaics) we walked round and round the sacred rock, and made on the architecture of the mosque many valuable notes, which have, however, no place in this report.

A more minute survey of the Sakhras than has yet been made is much to be desired, and could it be accomplished a good deal would come of it. The outline only is given in the Ordnance Survey, and the plan and section of M. Du Vogüé are not exhaustive of its details.

On the exterior of the stone I remarked several interesting indications, but what they tend to show is not yet clear. First, the western face, which is the highest, is an artificial scarp, and careful investigation shows that it has a broad step running nearly all the way along, and indications of a second. A gutter, also, or channel, descends the rock at its north-eastern extremity. On the west are indications as of stepping, to receive courses of masonry, intended perhaps to equalise its height, which is much lower on this side, sloping regularly to the floor.

The shaft so adventurously investigated by my predecessor, has now been closed with cement. The cave itself we entered and examined, but not too attentively; the mats on the floor were not removed. There appears to be a difference of sound in the floor on the two sides of the flight of steps by which the cave is entered, as though a hollow passage led beneath; Mr. Drake noticed this, and a similar sound at the northern end of the cave, on a previous visit.

The dome of St. George Mr. Schick has entered, and found nothing of great interest. We visited all the houses but one on the south side of the platform; they run under it a little way, but are not apparently rock-cut. On the west side the houses are built against the platform, and show no indications of rock, but an inner chamber in one, south of the great steps, had a very hard cement, and may possibly be worth examining by breaking through its eastern wall.

The steps, and the garden to the north of them, must also on the earliest opportunity be examined.

The substructures under El Aksa, and at the south-east corner of the Haram, the Golden Gate, and the northern scarp, though interesting to see, gave no new indications, and the only observation made further,



was on the apparent antiquity of the east gate of the platform. The fifth step, some 30 inches from the level of the interior, appears, though it is not a certainty, to be cut in the rock, an important indication of level. Old drafted stones appear in the side piers, the old columns built into the central piers have their bases below the present level, and finally, the line of the gateway seems almost, though it is difficult to judge, to differ from the line of the wall on this side.

Under the Dome of Spirits, at the north-west corner of the platform, Mr. Schick thought the rock was visible, but this I think extremely doubtful.

Next in interest to our Haram notes comes the investigation of the scarp on Zion, which was conducted on three separate occasions. Though already surveyed by Capt. Wilson,\* I have thought it worth while to go over it again, as of the greatest possible interest in the tracing of the old first wall on this side.

Commencing on the west, outside the Bishop's church, we found a rubble wall in hard cement, over which was a thin stratum of fine old shingle and broken pottery, beneath the more modern mound of *débris*; and in front of this the top of a stone, with apparently the remains of a vertical draft, was noticed, and a little farther off another was discovered, the line being a production almost of the present west wall of the city from the Jaffa Gate.

The wall of the Bishop's school stands, as does the whole of the dining-room, on the great buttress next in order. The steps are distinctly visible, and the scarp itself on three sides. We are informed that there is a sudden drop or second scarp. The scarp is continuous from the buttress, but not visible in the parts where it is not shown, but the foot of it is never seen, as it is covered by a pavement. The line of cisterns runs apparently behind the scarp, but they must all be examined thoroughly to see whether they are rock-cut or not, for the steps appear to be so, and it is therefore probable that those near it are entirely or partially so.

The four steps are possibly more modern work, as also the cutting back of the top of the scarp, which here appears, and is of irregular height.

Here again, in a room occupied by a shoemaker, the other scarp or side of this rock-cut rampart was found when the house was built; the northern pier of the room rests on rock at a level of 15ft. below the floor, but the top of the scarp is nearly on the same level with this floor. From these two indications we may conclude that the rock has been artificially lowered on the inside, forming a kind of covered way inside the wall, and that on the outside a precipitous scarp formed the foundation of what was no doubt the city wall on Zion.

Passing the second buttress, which has a step or return on the west side, at a height of about 5ft. we come to the remains of a cistern of some size, and coated with hard cement. Its position is

\* See Ordnance Survey map of Jerusalem,  $\frac{1}{25000}$  plan, and "Notes," p. 61.

puzzling if, as would seem most probable, its base was rock-cut, in which case the scarp must run here farther south, forming a step. The rock here projects slightly, and the scarp, which is here from 15ft. to 20ft. in height, runs on, forming the north wall of the English cemetery, and here another flight of thirty rock-cut steps appears.

These steps\* have been already examined by Captain Wilson, who excavated to a total depth from the top of the scarp, of some 35ft., but without striking the rock at the base. The excavation still remains, but is blocked with fallen stone at the end. Just to the east the scarp again projects and is lost under the rubbish outside the east wall of the cemetery. It is, however, to be remarked that here, as on the western side, the compact shingle mixed with pottery underlies the modern *débris*, and probably, as in the former case, overlies the masonry or rock.

Continuing our exploration eastward from the last point, we come on what appears to be a continuation of the scarp, or a sally-port with a rock scarp on either side. The indications here are, however, by no means so clear, as the rubbish has filled up the space between the two scarps, and as some of the details seemed to point to its being merely one of the innumerable rock-cut tombs round the city. On the outer or southern scarp, a broken cistern, another, small but complete. The remains of an oil press, and indications of what may have been steps, are visible. In the northern or inner scarp, which is also the highest, there are indications of a buttress similar to those before described, but a water channel cut in it at first disposed us to imagine this scarp to belong to a tomb. The rock is here traced in a north-east direction, going towards the Mosque of David, and three cave entrances lead to rock-cut irregular caverns, having apparently no connection with each other, and though thoroughly examined, showing no indications of value or interest.

Such is a rough sketch of the rock rampart of Zion, to the importance of which too much attention cannot be given. Its existence at a part of the town where nearly all agree the ancient city wall must have been placed, and the facility of examining it thoroughly, as being placed outside the modern town, in an uncultivated part, render it most desirable that trenches or mines should here be undertaken, to explore it more perfectly and follow up the valuable clue thus obtained.

The first requisite will be a proper survey of the part at present visible, which occupies a total length of some 300 yards, observing the lie of the rock in the cisterns, the distance apart of the buttresses (probably an important point), and the level of the top of the scarp. It will then be necessary, where possible, to find the depth below the present surface to which this huge effort of human labour is carried down; and, finally, the discovery must be followed up on both sides—northwards to the city wall on the west, and eastward or northward, as the case may be, from the eastern extremity of the double scarp.

The method best adapted for following the scarp on the west, is the

\* See Ordnance Survey Notes, p. 61.

driving of a mine from the side of the hill beneath the modern *débris*, at right angles to the presumed direction of the scarp or wall; whilst on the east the rubbish must be cleared out, and if necessary a shaft sunk between the two scarps, in search of indications of an entrance of some kind. Another shaft must subsequently be undertaken still farther east, in search of the continuation of the rock or of the foundations of the wall. The indications of its precise position are not as yet as clear as in the former cases. The thirty steps should be farther followed, and the total number of mines here required would probably be four, to be undertaken in succession, and none of them likely to be of very great extent.

To hazard a theory on the probable meaning of this interesting work is perhaps premature, but it suggests itself most forcibly to the mind that here we see the south-west corner of the first wall of Josephus, and very possibly the remains of one of the gates. Now, at the south-west corner, we are told, was the place called Bethso and the gate of the Essenes; and if, as Dr. Chaplin has suggested, Bethso and Beit-sur are the same, the meaning of the latter word as being the "place of the hard rock" may very well connect "the place called Bethso" with the scarp as now existing. In which case we might possibly discover the gate of the Essenes in the position where indications have been observed of a gate.

Eastward from the Zion scarp our explorations did not bring anything of importance to light. The rock on the brow of the hill appears constantly, so that, except round the Mosque of David, the *débris* cannot be of very great depth in this part, and the chance of finding foundations is therefore considerably reduced. It is, however, most striking to observe the immense labour devoted by the inhabitants at some period when the now uninhabited slopes of Zion were covered with buildings, either suburban or within the wall, to insure a water supply during the dry months of the year. Cisterns connected by small pipes or aqueducts, running in a chain one below another, and so arranged that it was not till the one immediately above was full that the second could receive any supply, are found in every direction. Many are now being destroyed by the Arabs in the process of quarrying stone, as it is of course more easily obtained by breaking in the thin surface of rock than by attacking a solid mass. Several large caves, some of unexplored extent, and rough rock-hewn tombs similar to those in the so-called Valley of Hinnom on the opposite slope, are also found, but do not seem to promise any indications, and the question of the exact course of the ancient wall is rendered still more difficult by the present lie of the surface (following no doubt to a certain extent that of the rock beneath), and apparently at variance with most preconceived theories on the subject.

On the opposite tongue of Ophel the same features reappear. Here an aqueduct of larger proportions than those on Zion has been broken up: part still remains intact leading to a cistern, in the roof of which is a shaft. This ought to be explored on the earliest opportunity. It is at a very much higher level than that explored by Captain Warren from the

Pool of the Virgin, and runs along the eastern slope above the Kedron valley. Dr. Chaplin and I also examined several rock-hewn tombs, but here, as on the western hill, no great indications exist.

The village of Siloam and its rock-cut tombs, which owing to the turbulence of the inhabitants is almost unvisited, next attracted our attention, and we ascended by the precipitous and slippery scarp which has been so cleverly identified by M. Ganneau with the stone Zohemoth of Scripture. The name "Zehweileh," and the interpretation, "a slippery place," we found to be undoubtedly in use and understood by the inhabitants, who were carefully questioned, with the same result in every instance.

In the village itself the inhabitants live partly in large caves and quarries, in which also their animals are stabled, a troglodyte propensity which appears very usual throughout Palestine, and is the more curious amongst a people to whom the labour required for excavation of such abodes is unknown, and whose buildings even are of the rudest description. All the houses in Siloam are modern, but the rock-hewn quarries and tombs are no doubt of great antiquity; on many of them, however, there are Christian crosses rudely cut both within and on the exterior; but in no case either here or farther north was there any indication of the *loculus* placed endways in the tomb, supposed to be characteristic of Jewish sepulchres.

Siloam may possibly prove a fertile source of inscriptions. Here M. Ganneau discovered on the rock the one containing the name "Beth Baal," and in the main street a rough stone with the appearance of Phœnician characters. Here also we were shown, built into a wall, one with square Greek characters of rough execution. This Mr. Drake copied, and a sketch is now forwarded. It appears to belong to a mortuary tablet, and is partly defaced. Farther north we again hit upon an inscription of most puzzling character, which merits to be more particularly described.

Immediately north of the village the steep rocky side of the Kedron curves back, and the valley between this point and the tombs of St. James and Absalom is broader, and on the eastern side less precipitous. A glance at the Ordnance Survey map will explain this better than words can do.

Here, then, a flat plateau of rock separating the lower precipice from the upper by some thirty or forty feet, leads to a rock-hewn tomb which stands above it in a kind of buttress, and contains on either side of the entrance a sort of rough window pierced through the rock.

Immediately east of this the rock is scarped back to a still greater distance, and at places on the present level, partly covered with rubbish, it is coated with a hard cement and painted.

On a ledge running approximately north and south, we discovered the pattern of which I send a coloured sketch, and in its immediate vicinity, the inscription, defaced partly by age and partly by the growth of lichen. It consists of small characters in white paint or



enamel, very hard, slightly raised from a ground of grey-blue cement. The characters are placed one beneath another in ten vertical lines, and are unintelligible, and almost impossible to trace. Of the date and character of this building, apparently lying east and west, and partly rock-hewn, it is probably almost impossible to give any idea.

Immediately below the rock plateau is a curious detached rock-cut tomb, consisting of one chamber with a recess in each of its four walls. Its exterior mouldings are almost Egyptian in character, and in front of its door is a small tunnel or rough stone vault lined with hard cement, and now filled with rubbish. The end is not visible, and being so near to the other cement-lined ruin, it would be interesting to clear it out.\*

The number of rock-hewn tombs here situated is large, and their character curious. The cross is found on several, and in none does the Jewish loculus exist. Some have recesses as though for urns or osteophagi, but few are sufficiently large for a body to be placed in them. They are all entered through small square entrances just large enough to crawl through, but afford room to stand up in comfortably. Some marks in the walls seem to indicate that lamps were hung or placed in niches. Two of the larger have stone-cut loculi in their sides, as shown in the sketches, with marks of a groove where the lid was placed.

The latter of these is better cut than most, and has a pointed roof. Some few have an inner chamber, but most have but one. In one of the sarcophagi a place for the head appears—not the ordinary roller for the neck, but a hollow sunk to receive the nape of the neck and the back of the skull.

Sunset put an end to our explorations, which might, however, be renewed with advantage, as the date and history of these tombs is a point apparently difficult to decide. They seem, however, very probably to have been at some time or other inhabited by Christian hermits.

These expeditions round Jerusalem might be continued for a long time, and probably would always bring to light new points which had before escaped notice. The southern part of Siloam, the slopes of Hinnom, and Aceldama, together with the extent of ground north of the city, all require minute investigation, and much is still to be recovered in the city itself. Some half-dozen inscriptions are still uncopied, and a most valuable addition to our information will be given soon by Mr. Schick, who is better acquainted than any one else with the depth of the rock at various points throughout the city. Three relics—a head, a bas-relief apparently from a sarcophagus, with Greek characters, and a Roman inscription—are built into the wall of the Prussian consulate, and are, I believe, still unpublished in England. Even above ground, in the heart of the town, there is still much work for a patient explorer to do.

On the north side time did not permit of much reconnoitring, but the indications observed were interesting. The discovery by Captain Warren of a wall running north of the Haram enclosure, and the existence of the

\* A plan and section of this are given in the Ordnance Survey Notes, plate 24, and p. 64.



rock-cut trench which may very possibly be anterior to Saladin's fortification of Jerusalem, would seem to point to a solution of the question of the course of the second wall east of the Damascus Gate. Explorations, and if necessary excavations, near this latter would be most interesting, and I fully believe productive of results.

That the gate itself is near an ancient entrance has been already proved, and to the east of it, therefore, if practicable, the wall ought to be sought and found.

There is, in conclusion, but one point of immediate interest to notice, and this is the Kalaat el Jalud, a rough irregular mass of rubble, set in hard mortar or cement, situate in a waste corner close to the modern city wall. Captain Wilson's investigations and trenches failed there to bring to light anything of interest, and the style of masonry has continued a puzzle to the present day. It is evident that dressed stone of some kind originally faced the rubble; and similar work was discovered in a wall near the Jaffa road, outside the present city wall, by Mr. Drake, who ascribes both to the Crusading period.

A window has lately been broken through the wall, and looking through we perceived drafted masonry of moderately large size.\* Descending first into a chamber, some 5ft. or 6ft. below the present level, we explored it, but found it to consist only of a mixture of rubble work, and drafted stones of small size, with a rustic boss; the roof vaulted and cemented, and the entrance a pointed arch. In the second chamber, which has the same vaulted roof, the walls are of similar masonry, but without rubble. The entrance has an older arch, inside which the more modern arch is built. At the opposite end of the chamber is a second arch, dimly visible; it consists of five stones, with a marginal draft, and the boss in the centre dressed. The draft follows the form of the stone, and the keystone is cut out beneath to give a point to the arch. Three or four courses of stone dressed, and with the draft as in the arch, form a wall running approximately north and south; above this is rubble work, as on the outside of the Kalaat.

But the most curious feature of this building consists of the two great piers of drafted stones, with a rustic boss. The length of one of these is some 7ft. 6in., and the sixth course appears to go through the vault of the roof of the chamber, whilst another course is just visible, the greater part being hidden beneath the floor. The appearance of these buttresses or towers is that of the entrance to a gateway; it is doubtful whether they have any connection with the arch, but at any rate they are much older than the rubble work of the Kalaat el Jalud, which has surrounded them.

The more we see of the drafted, or, as it is falsely termed, "bevelled" masonry, the more we become confused, and the greater the difficulty of fixing a date to any specimen. The draft was originally supposed to

\* These chambers were opened by Capt. Wilson in 1865, and a description of them is given at page 73 of Notes to the Ordnance Survey of Jerusalem, with plan and section, plate 27.

be an exclusive mark of Jewish work, but its frequent use by the Romans, its appearance in the wall at Passagardæ, and subsequently its use by the early Christian, and even in several instances by the Saracenic, builders, in Jerusalem and other places, have proved the fallacy of such a theory. Besides the huge smooth-faced Herodian ashlar of the Haram, Captain Warren distinguishes two kinds of masonry, the drafted ashlar with a rustic boss, and the drafted ashlar with a smooth-dressed face. Work similar to the former was used by the Romans, and (in smaller proportions) the smooth-dressed drafted ashlar by Romans, Christians, and Saracens. Thus it is impossible from the draft alone to tell the date of any kind of this masonry.

Far more characteristic of Jewish work is the enormous length of the stones, as compared to their height, which is exactly reversed in Roman work, where the height of the stone is sometimes greater than its length. The latter is the case in the rustic drafted stones of the Kalaat el Jalud, and as the rustic boss was not used by Saracenic architects, it seems most probable that these two buttresses, which seem to stand *in situ*, are Roman work at Jerusalem.

Of what exact date they may be it is more difficult to decide, for the largest of the stones are small compared with the drafted ashlar of the base of the Tower of David, and these again are dwarfed by the Haram walls; and still further it must be remembered that between the Roman work of Herod and that of Justinian, comes the period, so little studied, of the Emperor Hadrian. Surely of the two great market-places, the theatre, the mint, the tricameron, the tetranymphon, the anabathmi or dodecapylon, with which he ornamented the city, some traces must still exist, and must not be confused with the earlier work of the Jerusalem of the Christian era.

It would appear, then, that the Kalaat el Jalud, though dating itself at some period not earlier than the eleventh century,\* contains the remains of a building of Roman work, and possibly of two dates; whether, however, this structure belongs to the Ælia of Hadrian, or to some earlier work of Agrippa, or even, though this is scarcely probable, to Herodian date, cannot at present be decided.

Such are the results of a week's reconnaissance in Jerusalem; and, such as they are, they give some encouragement in the pursuit of archæological remnants, which, when compared carefully with former discoveries, may lead to results of some importance in the settlement of the vexed questions of the ancient topography of the city.

---

\* The Kalaat el Jalud is generally supposed to be the Tancred's Tower of the Crusaders, which, according to William of Tyre, was at the north-west angle of the city.

## MR. TYRWHITT DRAKE'S REPORTS.\*

## I.

CAMP EL JIB, *March 20th, 1870.*

On the 4th and 5th inst. we moved our camp from Beit Nuba, where we had stayed for nearly five weeks, to the site of the ancient Gibeon. The present village is situated on the northern and smaller top of the double hill which, shaped like a figure 8, lies in a kind of basin north of Nebi Samwil. This basin is a tract of fertile ground, producing pears, grapes, figs, almonds, &c., in addition to the usual ground crops and olives, formed by an eccentric watershed, which, beginning at the head of Wady Selaian, in the first instance flows due east, then turning southwards round Bir Nabala, passes Lifta and 'Ain Karim, and eventually reaches the Mediterranean near Yabneh. The heads of this wady to the north of El Jib are called Wady Askar and Wady Hammúd, which latter comes down from the north-east of Bayt Unia, divided by a low watershed from an upper valley, a rise in the bed of which forms a barrage. Above this a pool covering some six to eight acres to a depth of 2ft. is formed during the winter. It is termed El Balúa, "the sink."

Nebi Samwil lies a short distance to the south, on the culminating point of a high ridge running east and west, and is separated from El Jib by Wady el Kibliyeh. The view from this place, which is usually identified with Mizpeh, is extensive. It includes Mount Gerizim and the promontory of Carmel to the north; Jaffa, Ramleh, and a wide stretch of the maritime plain to the west; Jebel Furaydís (the so-called Frank mountain), the far distant mountains of Jebál, the town of Kerak, Jebel Shihán (the highest point in Moab), are seen to the south and south-east; the continuation of the Trans-ordanic plateau, with slightly undulating outline, stretches to the east and north-east. This reputed tomb of Samuel has naturally formed an important trigonometrical station, and is one of the few points known to me whence Jaffa and Jerusalem are both visible.

Beautiful scenery can hardly with truth be said to exist in this country, but some of the prettiest views in Palestine proper are to be seen by looking westwards from the edge of the central range. At one's feet are deep rugged valleys more or less clad with brushwood, and olive groves strongly contrasting with the white lines of upheaved limestone which gleam like the skeleton ribs of a dead cultivation. Beyond, softened by distance, lies the great maritime plain, here a vivid green, denoting a tract of young wheat, there a fallow of rich red soil bordered by a sombre mass of olive-trees, rendered still blacker by the shadow of a passing cloud, while a gleam of sunshine shows off the white houses of Lydd and Ramleh and the fine tower of the "White Mosque" against the setting of gloomy trees. Far beyond these a thread of golden sand divides the emerald of the plain from the turquoise of the sea. A rounded mass of white, in shape like an exaggerated molehill, glistens at the

\* The following letter ought to have been printed in the last *Quarterly*, but was delayed in the post.

north end of the sand dunes. This we recognise as Jaffa; beyond lies the sea, flecked here and there with a tiny white speck, the sail of some coasting trader. Nearer beneath us, in the "*Shephelah*" and lower slopes of the main range, nestle countless villages, few of whose names have yet blackened any map, for the land of the two tribes of Beni Hárith (the northern and the southern) is as yet a *terra incognita*, where the map-maker has not even ventured upon the normal wady resembling rather the veins in a laurel leaf than an intricate system of valleys draining an abrupt mountain slope. This district, lying north of Beit 'Ur el Foka (Upper Beth Horon) and extending nearly to Náblus, is cautiously marked "not examined." It seems thickly populated, and plentifully strewn with olive groves. The *sinowbar* (stone pine) is also found here.

A fine day at this time of year shows the country in its best cloak. A little later in the season every blade of grass will be withered up; the shrubs on the hills will be blackened and parched; the plain will be covered with an impenetrable veil of white mist known to the African traveller by the appropriate name of "smokes." Above head the sky will be that pitiless glare of changeless blue, never to be relieved by a single speck of cloud till the welcome rains of autumn begin to cool the scorched soil and burning rocks. These fine days of early spring are rare, however, and we must often look for cold pelting rains, mists, hail, and even snow—though the latter very rarely, and only on the central range. While I am writing these lines hail is falling, and dense fogs, accompanied by sharp showers, at intervals are hurried up by the violent equinoctial gale from the south-west, which threatens every moment to tear the frail cotton shelter from over my head and hurl it into the neighbouring valley. Stout guy ropes and piles of stones on the tent-pegs have as yet succeeded in baffling Æolus, though for three nights and days we have been obliged to be on the alert every instant to save our tents from wrack and rain. Only a few days ago the weather was like a fine June day in England.

Such are the changes of temperature to be found in this country from Petra to Damascus. Just two years ago I was snowed up near the former place at an elevation of 4,500 feet, and three weeks later in Moab, being only 1,500 feet lower, I sighed for a lump of snow to put in my tea, the thermometer standing at 105° Fahr. in the shade. At Damascus (2,340 feet, in the Saláhiyeh suburb) snow is rare, though sleet is not uncommon in winter. In summer the thermometer ranges up to 100° Fahr. in the shade, and there is at times a difference of as much as 30° between the dry and wet bulbs.

Exposed to these extremes, the fellahin suffer a good deal from rheumatism, coughs, and bronchitis. The men wear a sheepskin coat as a wrap on warm as well as on cold days, but the women make no change in their dress, which usually consists of nothing but a long blue chemise tied in round the waist, a bonnet of red cloth decorated with an edging or roll of silver coins bordering the forehead and extending to the ears, reminding one of the crescent-shaped female head-dress worn by some of the Egyptian priestesses; over this a veil or shawl of coarse white cotton is thrown and hangs down to the waist: it serves to cover the mouth, while the bosom is left exposed, eastern and western ideas of

decorum differing on some points. In certain districts, however, such as the eastern Anti-Libanus and Jebel ed-Druze Hauran, where the villages are not unfrequently snowed up for forty or fifty consecutive days in mid-winter, all the inhabitants must perforce use sheepskin coats, which are also worn by many Bedawin tribes. In the towns the richer classes have many imported luxuries, such as broadcloth coats lined with Russian fox or ermine. Many men, both Jews and Moslems, continue to wear these furs all the year round, both here and in Turkey.

It is well known that the population of this country must, even as late as the sixth and seventh century, have been very large. I was hardly prepared, however, for the number of ruins which I have come across. Many persons would doubtless smile in pity were I to show them a hill-top now occupied by a rude wall enclosing a few fig-trees and a rock-hewn cistern or well, and say, "Here is the site of a considerable town." Most of the ruins are at the present day invisible to the unpractised eye, but may be traced by the wells, tanks, and caves hewn in the rock—the latter still inhabited by a race of Troglodytes half agricultural, half pastoral—by fig-trees and an olive grove, or a few patriarchal trees split by ages into two or three distinct trunks,\* grey and gnarled relics of former prosperity. The eye will detect carefully-squared stones in the loosely-piled walls of the garden or sheep-fold, and inquiry will teach the traveller that everywhere beneath the soil, where vegetation assumes a deeper green, covering perhaps two or three acres, squared stones will be found thickly strewn. In another place a few heaps of stones, the universal wells, and a few foundations may be traced above ground. Unimportant as these ruins now seem, chance will occasionally throw a gleam of light on one, and analogy leads to a true value being put on others.

I had heard the name of Deir el Rohbân (Monastery of Monks) applied to some ruins said to exist between Latrûn (which, by the way, is always called *Ratlûn* by the natives) and Shaykh Músá Tell'ia, a saint-house—of which more anon—conspicuously perched on an isolated block of hill which forms an out-work of the *Shephelah*, and whose west edge is occupied by Tell el Jazar. On riding up to the ruin I could at first see only a few heaps of stone in the form of hollow squares, outlining the ancient houses, but nothing to denote a site of any importance. Presently I came upon a long sunken building, some 60 × 15 ft.; at one end of it I found a small door and part of the circular vaulting (with keystone) which formerly covered it all in. The masonry was good and the stones well hewn: the quarry from which they were cut is visible about a quarter of a mile to the south-east. A neatherd from Amwas, in the territory of which village this ruin is situated, told me that the rest of the vault had been demolished by the people of Ramleh for the sake of the ready-hewn stones, as they found it much easier to carry them that distance than to quarry them nearer at hand. This deportation of stones has spoilt many a ruin. The site of Khalasah in the Negeb, for instance, is left almost stoneless

\* I frequently observe that the bark gradually encircles these split trunks, which at last assume the appearance of two or three trees growing from one root. Thus the olive indulges in a second childhood.



by the pilfering of the Gaza folk. The shaykh of this village tells me that his father and others built their houses entirely of the stones which they brought from the ruins of El 'Amayziyeh, some two miles distant. In fact, wherever a ruin is handy, the fellahin prefer digging up the well-cut seasoned stones to the toil of cutting them afresh.

Turning from this vault I crossed a small ploughed field and suddenly found myself on the brink of a circular, well-shaped cistern of careful construction. It still measures 31 ft. in depth, though the bottom is a good deal choked up with earth and the plaster which has fallen from the sides. The diameter across the present top is 25 ft., but the opening must formerly have been much smaller. The diameter at bottom I should estimate at some forty feet. It is lined with stones, of which the faces are nearly uniform in size, with a broad draft and small rustic boss; sectionally the stones are alternately long and short, are backed by a bed of rubble and cement, and this again by rough masonry of undressed stone. One conduit, about 3 ft.  $\times$  2 ft., and two smaller channels, lead into this reservoir, which in places retains a lining of cobblestones covered with plaster. Hence it would appear that the stones were drafted not for ornament but for use.

Had it not been for this cistern and vault, there would have been no proof, without excavation, that this ruin was ever more than a village such as the fellahin now inhabit, and there is no legend or name to make us believe that it was other than an ordinary townlet of the period. These two works, however, clearly prove the existence of a large civilised and industrious population, of whom no other trace remains except a few fragments of glazed pottery, a ware now unknown in the country, and rarely found in ruins. The same fact is also proved by similar works scattered among other ruins, by the grape and olive presses, by store or dwelling caves, by wells, cisterns, graves, and quarries, all hewn out of the solid rock, and which are everywhere abundant, but especially in the *Shephelah*.

When we come to consider the labour that must have been expended on a single cistern 20 ft. to 30 ft. deep, shaped like a church bell or inverted funnel, the opening being nearly 2½ ft. diameter, and the bottom 15 ft. to 25 ft., and cut out of the solid limestone, we can realise the industry of the people who have left countless examples of these works to be neglected and uncared for by the ignorant savages who now inhabit the land. It is no uncommon thing to find groups of 3 to 10, or even more, of these fine excavations. Some are near modern villages, in which case the lazy fellahin will every few years clean out the accumulation of filth and mud which has been swept into them by the surface drainage, for the passage of which I have seen channels cut through masses and heaps of garbage and manure thrown on the outskirts of the village, revolting alike to eye and nose. Others are found scattered over the country, and I have frequently observed isolated examples on hill tops, where they would be supplied by no more than half an acre to an acre of surface drainage.

As I have before mentioned, modern Troglodytes inhabit the old caves in common with their cows, sheep, and goats. The entrance is usually a smooth-dressed passage cut in the rock, about 3½ ft. to 4 ft. wide, open above, and descending either by an inclined plane, or shallow steps, to the doorway of the

cave, which is 4 ft. by  $2\frac{1}{2}$  ft. The walls of the cave itself are seldom smoothed; in shape it is circular or oval, and rarely 6 ft. in height. The centre is occupied by the cattle, while the portion reserved by the human part of the community is marked off by a line of stones, and sometimes assumes the form of a *mastabah*, or slightly raised narrow daïs. The manure is carried out every morning and deposited in a heap just so near as not entirely to block up the gangway. The state of the cave after a heavy down-pour of rain, which contributes some six inches of water to the general Augean uncleanness, the slimy damp of the walls, the mosquitoes, the vermin, the reek of men and beasts, makes an ordinary English pig-stye a palace by comparison. And yet the indolent, able-bodied rascals, dignified by the title of reasonable beings, who own this byre are too lazy to build themselves huts, but prefer using the caves bequeathed them by the Hebrews and heathen of old, and lounge over the hills with their herds, or, rolled in their *abbas*, snooze in some sheltered nook without a thought or an aspiration beyond cramming their stomachs with crude wild herbs, or gathering a few piastres by hook or by crook, but, most important, with the least possible exertion to themselves. These men are often too indolent to turn an honest shilling by acting as guide for two or three hours, but will make their miserable women and children tramp ten, fifteen, or more miles in the day, to and from market to sell a bundle of dry stalks, called by courtesy firewood, a skin of milk, or a few eggs, worth in all sixpence or eightpence. The cave-dwellers I must, however, allow are sunk but little lower than their house-sheltered brethren. Their wants are few, and their means of supplying them equally scanty.

The goods and chattels of a modern Horite may easily be catalogued, say, some twenty or thirty sheep and goats, and four or five head of cattle, a half-starved dog, a couple of wives, and half-a-dozen children, a pair of donkeys, and a rusty gun, a few skins to hold milk, an earthen jar or two, a quern, (perhaps) a couple of tazzas of common pottery, rarely of tinned copper, to drink *leben* (soured milk) out of, a primitive plough and ox-goad, the woodwork being of home manufacture, and the iron share and spike, the handiwork of itinerant *Nawwar* (gipsies)\*, and these with a few bits of hair-cloth, which serve as wraps, bedding, or sacks for grain as occasion requires, complete the list. Wild herbs, especially mallows, *Khabbayzeh* (a general food for the poor in N. Africa, Syria, and Palestine), millet bread, and various preparations of milk form his chief diet, which is varied only by flesh when the rusty flint, or match-lock, succeeds in knocking over a partridge, or gazelle, crow, or hyæna, or when the throat of some sickly goat must be cut "to save its life." Beef is almost unknown in Palestine, and not at all appreciated, as none but diseased beasts, or those past work are slaughtered. A man once said to me, by way of showing that hyæna's flesh was fair, though not first-class food, "it's very like beef." In the villages, poultry, eggs, and pigeons were common, though

\* These people, who are found all over the civilised, or semi-civilised world, from S. America, to Siberia, still retain their original (one of the East Indian) dialect, and always follow the same trades; tinkering, dancing, weaving, baskets or chairs, horse-dealing, and chicken stealing, palmistry, and general knavery.

the former are rarely eaten; olives, *dibs* (grape-treacle), barley, or sometimes wheaten bread, are added to the above list.

I made mention of a saint-house—the tomb of Shaykh Mùsà Tellia—a few lines back, and will now give some details about these sacred spots. In European books and maps they are usually termed “Welys,” confounding the entombed with the tomb, the saint with the saint-house. They are of two kinds: 1. The actual tomb in, or more properly—for the Moslem religion objects to burial in a place of religion—adjacent to a small domed building which serves as a mosque, and which invariably has a *Mihrab* (prayer niche) turned towards Mecca. 2. A *Makham*, which I cannot translate better than chapel, either with or without a cenotaph. This is a dedicatory building to a prophet or saint, erected, more or less rudely,\* either in fulfilment of a vow, in obedience to a dream, or prompted by ostentatious piety.

Either class of building is considered equally holy, ploughs and other agricultural implements deposited in them are perfectly safe. In Moab I noticed that the graveyards on the open plains were heaped with ploughs which no raider or pilferer ever dared to remove. An oath upon a saint's tomb, especially if like Sidna Ishak (the patriarch Isaac) at Hebron, he be famous for a violent temper, is generally to be depended upon. I heard, however, of an instance at Kharaybeh in the Anti-Libanus, where a man perjured himself at a shaykh's tomb about some money matters. Soon afterwards one of his cows died, and he was so impressed with the belief that this misfortune was due to his falsehood, that he incontinently went and confessed to his debtor, and apologised to the saint (shaykh) whom he had insulted. In Morocco the natives believe that to shoot a bird which has taken refuge with a sidi (saint) is to incur the certainty of fever or other illness, and the probability of death. Many instances were quoted to me in proof of this belief. I usually considered the illness brought forward as due to malaria.

A tree growing, as one usually does, over a shaykh's tomb is like the Fijian “taboo.” It is never cut, and if a bough breaks off in the course of nature, it is not carried away for fuel, but carefully laid up near the tomb. In the same way any fragments of the building or tomb which decay and fall are not

\* That of Nebi Barok (Prophet Baruch) on the Anti-Libanus is merely a rude oval pen of stones without a roof, and ornamented with a few dedicatory camel sticks and switches. Shaykh Abu Zeitun, on the contrary, near Beit 'Ur el Foka, has a mosque, with chambers for pilgrims, well built and strewn with matting. The tomb of his mother (Umm el Shaykh, Bint Ahmad el Dujáni) on the same hill, is a larger building, but not so well kept up as her son's, to which *wakf* or glebe land is attached. It is not known who Shaykh Abu Zeitun was, nor what was his name in life. He is called the Father of the Olive, from the fact that long ago a man dreamt that he saw a light burning on the hill, and that a man of majestic appearance intimated his wish to have a mosque built there in his honour. Urged by this the dreamer went to the spot, saw a curious light, and to his great surprise found a fine olive-tree growing where none had been the day before. He was so impressed that he forthwith built a mosque in honour of Abu Zeitun, who enjoys at the present day a very high reputation through all the country side.

thrown away, but scrupulously preserved, generally in some out of the way niche or corner.

It is easy to trace in the reverence paid to these tombs, and the sacrifices of sheep, &c., offered at them, unsanctioned by the strict laws of Islam, traces of the old worship of demi-gods, heroes, and local powers, still retained in the Romish and Greek churches under the guise of adoration to saints, martyrs, *et hoc pecus omne*, traceable, too, through the belief of the peasants of Europe in fairies, elves, trolls, and gnomes. The custom of hanging rags, &c., on certain trees, may also be a lingering of one of the earliest material worships, that of trees.

One point to which I am specially directing my attention is the lie of the old Roman and other high roads. These are in many cases easily traceable and will eventually prove of great topographical value in elucidating sites noticed in old itineraries. I have already been able to trace several, which I shall treat of at greater length on a future occasion.

JERUSALEM, *March 2nd*, 1872.

Having finished our work in the neighbourhood of El Jib, we moved up here on the 23rd. Directly after Easter I intend to move down to Jaffa and survey that neighbourhood, which has not yet been done, as the expedition commenced operations at Ramleh. I hope to get this bit of work done before the Khammasin winds (*sirocco*s) set in in May. The summer months I intend to pass on the main range, as the highest and coolest district to be found.

---

## II.

P. E. F. CAMP, NABLUS, *July*, 1872.

Taking occasion of the non-commissioned officers having fifteen to twenty days' indoor work, for which the Rev. Mr. Elkevy, Protestant clergyman here, kindly lent a room in his house, on the 21st ult., I started for Damascus, to take a few days' change of air after an attack of fever, and also to make arrangements for baggage mules better than those under the existing contract, the term of which is nearly expired.

I took the most direct route, viz., by Nazareth, Tiberias, and Kunayterah, accomplishing the whole distance in three and a half days (34 hours). This route has been so often described that I shall merely notice the great difference that has taken place in the country within the last few years, and which is chiefly owing to the suppression of Bedawi *ghazzawat* (raids). Less than eight years ago the Plain of Esdraelon (*Marj Ibn 'Amr*) was the favourite summer camping ground of various trans-Jordanic tribes, notably the Ruwalla, one of the great clans of the 'Anazeh tribe, as well as others of less importance. These sons of the desert not only prevented the cultivation to any great extent of this wide and fertile plain, but also exacted black mail from the unfortunate peasants, whose cattle and crops were, notwithstanding this,

frequently lifted or destroyed. On my first visit to the plain, in 1870, not more than one-sixth or one-fifth was under cultivation, and the same was the case in the following year. In both these seasons, however, there had been a sad deficiency of rain. On this last visit I was somewhat surprised to find nearly the whole plain covered with splendid crops, which I estimated to be distributed in the following proportions:—

Corn and barley .....	45·0
Millet .....	35·0
Simsim (sesame) .....	
Cotton .....	} 10·0
Castor-oil .....	
Fallow land .....	10·0
	<hr/> 100·0

The Nazareth people, owing to the abundant rainfall, were induced to sow a very large tract, and the result has been a most splendid harvest. Considerable difficulty is found in conveying such a quantity of grain and straw to the village, as it has to be carried on camels, mules, and donkeys, some four or five miles, half of which is over an execrable mountain path. This inconvenient arrangement is necessitated by the fact that all the crops must be thrashed on the village threshing-floor in order that the 'ashr or tithe may be there taken from all at once.

Instead of the countless black "houses of hair," as the Arabs term their tents, which used to swarm here, I saw but two ragged specimens, so torn and tattered as scarcely to afford even shelter from the sun, and inhabited by two miserable families, whose sole possessions were a few goats. Certainly the glory of the Bedawi is departed, and were it not for the increased exactions of Government the condition of the fellahín would be much improved.

At Tiberias I made inquiries about the colony of Jew fellahín living at Bakín, some three or four hours distant from Safat. The account I had previously received at that place was confirmed. They consist of ten to twelve families, whose occupations and manner of life differ in nothing from that of their fellow-villagers, and they intermarry with the Jews of Safat and Tiberias. I am not aware that these men have ever been visited and described by any traveller, and it would be interesting to observe them following the pursuits of their ancestors in the land which once was theirs.

At the Jisr Benat Yakúb I found the Jordan a quick, brawling stream, some twenty-five yards wide, but in bulk scarcely one-quarter of what it is at its final exit into the Dead Sea. This is easily accounted for when we take into consideration the size and importance of its lower tributaries, the springs around the shore of Tiberias lake, the Nahr Yarmuk, which, flowing down Wady Mandhur, falls into the Jordan a little north of the Jisr el Mejamia, bringing down the whole



drainage of Jayd'úr, the Jaulan, and the Hauran (Ituræa, Gaulonitis, and Auranitis), together forming a stream but little inferior in size to the Jordan itself as it issues from the Sea of Galilee. The streams, too, from Wady el Arab, Wady Jalúd, and the numerous springs above Beisan (Scythopolis), all add to the main stream, though during part of the year nearly all their water is absorbed by irrigation.

Leaving the Jisr Benat Yakúb, some twenty minutes brought me to the summit of the Jaulan plateau, which consists of red soil thickly strewn with basaltic boulders. Small springs are numerous, and in their vicinity are considerable tracts of *dawah*, or millet, belonging to the Turcomans, who number some 600 tents in this district. At 2.20 I began to enter a woodland, sadly spoilt by the ravages of charcoal-burners, who destroy with fire many more trees than they are able to cut up with their primitive hatchets. The trees consist of evergreen oak (*Q. pseudococcifera*), *butm* (terebinth), and *z'a'arûr* (hawthorn). I then passed Tell el Khanzir, a volcanic mound with a crater opening northwards. Tell Abu Nedda (the Father of Dew), lying west of Kunayterah, seems formed entirely of mud; the plain surrounding it consists of yellowish volcanic clay overlaid by a thin stratum of hardened grey mud, which resolves itself into almost impalpable dust in the roads. I noticed that all the craters of these tells open in a northerly direction, as is the case with the Tulul el Safáh to the east of Damascus.

At Kunayterah I found an encampment of the Fádil Arabs between the spring and the ruins, and betook myself to the tent of the shaykh. After a little while some of the Arabs managed to pick a quarrel with a Kurdish *zabtiyeh* (irregular horseman) who was with me, and nearly got up a row, but a little forcible language soon brought them to their senses, and two of the shaykhs came and kissed my hands with abject humility.

These Arabs have large herds of cattle, but very few goats or sheep; they own several mares, which, however, are not worthy of much notice.

The night was cold and the dew heavy. Next morning when I started, shortly before sunrise, dense clouds hung on the tells and Hermon, but were soon dissipated by the warmth; but for the first hour I felt that a great-coat would have been a luxury. From Kunayterah to Sa'sa a paved road is traceable, and in places is in almost perfect preservation. It is usually said to be Roman, but the extreme crookedness of the line militates against this idea. In places *détours* are necessary to avoid a morass, but this route is exceedingly, and, to all appearance, unnecessarily, devious in crossing the basalt field west of Sa'sa. At this village, situated on the 'Awaj, which Mr. Porter dogmatically informs us was the ancient Pharpar, is a large khan, which the same authority tells us was built by Sennan Pasha, who greatly distinguished himself in this line of architecture; but the stone over the principal gate has never been inscribed, and I was unable to find any date on the building. The khan

is very large—some 200 yards square—and is built of twenty courses of limestone upon three of basalt, the stones in all cases being drafted.

As I was leaving this place an Arab from Dor el Baydha, in Morocco, joined me, having just been stripped on the road I had come over. The robbers were two men, probably Druzes, who only left the poor fellow his cap, slippers, and a bit of cotton rag, taking from him his cloak and shirt and thirty-seven piasters, his sole possessions. This man had been to Mecca and Jerusalem, and was now on his way to Kerbela, near Baghdad, to visit the tombs of Hasan and Husayn, before returning to his own country.

Leaving Damascus on July 13th, I rode to Sunamayn. This name, "the two idols," is taken by Mr. Porter as being derived from two high and conspicuous towers, but unfortunately for the theory there are five towers, of almost equal height and prominence. The name, as was first suggested to me by my friend the Rev. W. Wright, of Damascus, is probably derived from a block of basalt lying near the city gate, on which two figures are sculptured in bas-relief, and though much battered and defaced are still quite recognisable.

The square towers in this part of the Hauran have all the appearance of being Saracenic work. They "batter" considerably, and are usually ornamented with two or three ornamental cornices at intervals, generally on a level with the floors of the different stories. These cornices, however, are not unfrequently made up of odds and ends, which shows that, whatever the date of their present construction, they are made up of the *débris* of other buildings. In one tower the window of the upper story is placed nearly half its breadth askew, and in another, at Taffas, near Mezayrib, a rude pointed arch is introduced, which further confirms their modern origin. In various parts of the town I noticed pieces of ornamentation, well executed but more florid—as, for example, a sort of honeysuckle pattern over a window—than what I had been accustomed to in the eastern Hauran.

On the road between Sunamayn and Damascus large caravans of the huge well-fed Hauran camel were constantly met with, bringing corn and barley to the capital. The return animals were usually unladen; some carried a box of apples or apricots, or a few wooden pitchforks, or other equally rude agricultural implements. These caravans number from twenty to sixty camels, and are accompanied by a man to every two or three beasts. A few flintlocks and rusty pistols are still necessary to ensure their safety, for though the great raids are now rare, small forays are of everyday occurrence in the Hauran. Only the day before I reached Sunamayn, a small party of Arabs ('Orban el Jebel) from the Druze mountain had ridden up to the village and carried off a camel and a horse. The next day, too, at 'Ain K'taybeh, I found an Arab with a sword-cut on his arm which he had received during the night from a band of plunderers whom he met on the road.

Soon after my arrival at Sunamayn, a party of Damascenes who had lent money to the villagers arrived to look after their interests. The

dress and appearance of these amateur travellers in the "Chól" amused me sufficiently. Silk robes and patent-leather boots, silver narghilés and worsted-work slippers, green-lined umbrellas and a folding iron chair-bedstead were the order of the day. Stretching their weary enervated limbs on hastily improvised divans, they managed to regain sufficient strength to attack with success the huge dish of *burghul* (crushed wheat) and mutton which the shaykh brought in for our dinner about 8 p.m.

On July 14th I left Sunamayn at 4.30 a.m. As the route from this place to Umm Keis (Gadara) seems but little known, I give my route and time, which, I must premise, is at the rate of about four miles an hour, as far as Mezayrib; thence to Umm Keis and Beisan little more than three, owing to my baggage-mule having suddenly become lame, and my being compelled to take any kedîsh (pack-horse) that I could find at the different villages.

I hope our American cousins will not feel aggrieved at my having ridden through a corner of the country east of the Jordan, of which they will "be monarchs so soon as they begin to survey." I am, however, quite ready to put forward various claims, both direct and indirect, arising from the fact of their having delayed their expedition so long that, as yet, no cairns have been erected east of the Jordan to enable us to connect the two surveys.

	H. M.	
Sunamayn to Ignayyeh* (L.).....	50	Small village.
„ 'Ain Ktaybeh (L.)	50	Tell and ruins; small birket, from which a spring flows.
„ B'gayya (R.) .....	25	? Bukayya. A spring rises here which passes on to the next, and by a canal to Dilleh, whence it seems to be carried off in a south-west direction, not as stated by Murray (p. 504, vol. ii. ed. 1868) to the south-east. A broad marsh extends to the east, full of flags and rushes.
„ Second ruin of same } name (R.) .....	10	
„ Dilleh (R.) .....	25	
„ Shaykh Meskin (R.)	1.35	Village.
„ Taffas (R.) .....	2.15	Village. D'ail (vil.) about half mile to L. at 1.10.
„ Mezayrib .....	45	
Total .....	7.15	

This road is over a monotonous plateau beside the telegraph posts—the wires in many places being absent, owing to a prejudice conceived against them by the Arabs, which they show by cutting them—sup-

\* These places are spelt in Vandevelde, Kuneiyeh, Kuteibeh, Dilly, Eshmis-kin, Tufs, and Mezariib.

posed to connect the garrison at Mezayrib with the authorities at Damascus. In places a fragment of paved road appears, but seldom elsewhere than across some piece of ground which in winter would become a swamp.

At Mezayrib the Kalaa or Fort—the residence of the Mutasserif of the Hauran—a Saracenic building, is separated from the cavalry barracks, which though not yet completed are already falling to ruin, by a small stream. After supplying a mill, this water runs into a lakelet in the centre of which the village is built on a small tell of basaltic boulders. It is connected with the mainland by a rough narrow causeway, and in the old days must have been unassailable by Bedawi *ghazzawat*. Fish of considerable size are said to exist, but the fellahín are too ignorant and lazy to take them either by net or line.

During the summer months a cavalry camp of three or four troops is pitched here and serves to keep the Sirhan Arabs, the Benú Sakhr, and the Wulid 'Ali in some sort of check. I noticed some handsome mares here belonging to the two former tribes. Indeed they are considered to have the best mares in the desert, which is accounted for by their frequent proximity to Nejd. The fellahín told me that some ten years ago these Arabs used to exact blackmail from them regularly, and not content with this would come into the houses and carry off food, clothing, and household utensils, but that since the establishment of troops in the Hauran these objectionable practices have been put a stop to.

A sort of huckster's market is now established during the summer months at Mezayrib, in which all kinds of odds and ends and trumpery are sold to the Bedawin, often in exchange for *semn* (clarified butter).

The climate of this place is unhealthy and feverish and the water tepid. The far-famed fleas, too, of the Hauran keep up all their *prestige*, and effectually banish sleep from all but pachydermatous fellahín.

July 15.—		H. M.	
Mezayrib to valley.....	45		Here the limestone again appears on the surface; flints in wady bed.
„ Wells in Wady Shel-láleh .....	2. 0		Immense herds of she-camels belonging to the Benú Sakhr watering here.
„ Maghaïr .....	1.15		
„ 'Arbid * .....	45		Ancient Arbela.
„ Kufr Jyyiz .....	1.30		Small village to right. Excavated tombs, quarries, and wine-presses scattered about.
„ Síma .....	15		Small village on road. Wells ten minutes further.
„ Hátib .....	1.20		Small village half mile east of road.
		7.50	

Putting my scanty baggage on a camel, as the mule was scarcely

\* Spelt by Vandeveldt, Irbid.

capable of walking, I rode on ahead. Just above the wells in Wady Shelláleh is a ruined bridge or aqueduct (? from B'gayya) across the valley, built of large drafted stones. A little higher up the wady are several excavated caverns, in one of which I observed (pigeon ?) holes similar to those which have so much puzzled travellers at Beit Jibrin and Deir Dibwan in Palestine. On my arrival at 'Arbid the kaimakam sent to ask me to rest with him, which I did. After breakfast the mejlis (tribunal) assembled and began to discuss affairs.

Imagine a room some 20ft. by 15ft., with mud walls and floor, and smoke-stained roof of beams and brushwood, supporting a layer of earth. At the end a divan occupied by the kaimakam and self; on two sides the native shaykhs, &c., seated on rush mats and smoking long chibouks; the other end, lighted by a window and door, through both of which zabtiyehs (horsemen), fellahín, and others, were continually coming and going.

The kaimakam was a civil little Turk, dressed in a cotton *kumbaz*, which would have been improved by soap and water, over which to receive me he had put a fur cloak, which the heat, however, soon compelled him to discard. His Arabic was scanty, and spoken with a broad Turkish accent. The members of the mejlis were of the usual type, one could read, none could write. Soon afterwards the mutassebji (tax-collector), a dapper, self-satisfied little Damascene Christian, speaking fair French, came in.

*First case.*—Enter a man and speaks to the kaimakam thus: "Oh, Bey, I wish for the release of Mohammed, now in prison."

Kaimakam, to zabtiyeh: "Bring him in."

Member of mejlis to prisoner: "What are you here for?"

Prisoner: "For shooting a man whom I did not shoot."

K., to friend: "What is the man here for?"

Friend: "For shooting a man in the ghor. The man's brother brought him here, but he's a Belga Arab, and is gone home, so I want you to let Mohammed go."

Member of mejlis (in dogmatic parenthesis): "As we have imprisoned him so we have power to release him."

Kaimakam: "But if we let him go and the other man wants to prosecute him, will he come?"

Friend: "Oh, yes, to be sure he will."

Exeunt friend and prisoner in triumph.

Secondly comes on a complaint from some of the villagers (Greek Christians) of El Hasm, that the Mohammedans prevent their drawing water from the only well in the place. Pandemonium in the mejlis. Six or seven men scream and gesticulate at one another for five minutes. During a momentary lull a voice is heard to observe quietly that this is like a quarrel between two Haríms. A dead silence for a few moments and then the matter is discussed more quietly, and the Moslems are ordered to let the Christians have their share of the water after ten days. The Moslem shaykh goes out spluttering uncouth oaths.



Then begins a discussion wilder and stormier than the first, till one of the chief disputants sinks back exhausted. A voice then suggests the fact—"There is no deity but God, and all men were made by Him; the rain is His gift: therefore let all men partake equally of it." A murmur follows of "Wallah! that's true! That's just!" and orders are given that the Christians are to take what water they require.

While a pack-horse was being procured I took a glance at the large circular basaltic mound which formed the old fortress. It is about three hundred yards in diameter, with a depression in the centre containing several ruins built of old materials. On the outside a wall of large unhewn stones is in places visible.

Balked in my intention of proceeding the same evening to Umm Keis, by the continued sliding of my baggage from the back of the Rosinante told off to carry it, I was compelled to stop for the night at Hatib. Just before reaching that place I was joined by some sixty irregular horsemen from Jerusalem who had been riding the Jebel 'Ajlún to collect the *willi* or tax imposed on the tent-dwelling Arabs.

July 16.—		H. M.	
Hatib to Belka	.....	1.15	Lost thirty minutes here by mistake in road.
„	Sáfin.....	1.15	(? Safineh, the Ark.) A ruined Roman station on a tell to the left of the road, which in many places shows traces of pavement, and in others is cut through the rocks, and still shows marks of wheels.
„	Umm Keis	20	
		2.50	

The greater part of this route lay through a woodland of *ballut*, butm, hawthorn, *kharrub*, and large-leaved lime-trees. The road, as is almost universally the case with those engineered by the Romans, runs along a ridge, thus avoiding all unnecessary gradients.

The hundreds of basalt sarcophagi scattered about Umm Keis are of the regular North Syrian type, ornamented with bosses and floral scrolls on the sides, and covered by a ridge-topped lid having greater spherical knobs at the corners. Mr. Porter (Murray's Guide, vol. ii. p. 302) states that this basalt must have been brought from some distance. He is seemingly unaware that the town stands partially on an outcrop of basalt, which falls away in steep cliffs to the ghor due west of the town, and distant a little more than a mile. For a further account of the ruins I may refer to his description, which is, with this exception, correct.

Leaving the ruins I intended to go to the *Hammeh*, or hot-springs, and a zabtiyeh, who had been sent to escort me from 'Arbid, professed to have come that way only three days previously. Having no map with me I wildly put my trust in him, more particularly as we began

on the road which I had ascertained from the fellahín to lead to the springs. At the end of forty minutes, however, I found that to reach them we should have to go back to the ruins, and as this would have entailed sleeping in the ghor without food or forage, as we could not have reached Beisan that night, I was reluctantly obliged to give up visiting them.

Meeting a *natúr*, or watchman for the crops, I asked him to show me the way to Beisan, which could be seen from the edge of the cliff 100 yards distant. The man expressed unwillingness and ignorance. One of the soldiers then gave him a push on the shoulder with his open hand, and told him to go on. At this the man began to trot along the path, and wringing his hands to cry, "Dakhl Allah, dakhl Allah," &c. (I seek protection of God). Warming to his work he got into a regular howl, and then flinging his pipe and stick away on one side, slipped off his abba (cloak), then his blue shirt, and lastly his white one, then standing in a state of nature he wrung his hands and howled more wildly than ever. Finding that we were all laughing, he suddenly ceased and turned towards us with a most sheepish look. I blandly asked him if he was insane. He replied in the most natural voice, "No, I'm only a poor devil," and trotted off to pick up his property, doubtless feeling that he had been very much ill-used.

My route is as follows:—

	H.M.	
Umm Keis to edge of cliffs .. . . .	40	With a <i>détour</i> .
„ edge of ghor .....	1. 5	Steep descent; bad track.
„ stream at Wady el	45	{ Water-melons grown here; water tepid, with slight taste of sulphu- reted hydrogen.
‘Arab .....		
„ Ford of Jordan.....	50	
„ Beisan .....	2.10	
	<hr/>	
	5.30	

The ford over the Jordan is nearly north-east of Beisan. At the best place the water was only 1½ ft. deep, but I rode up the bed of the river for about 100 yards without the water coming up to my saddle-flaps.

At Beisan the Kadi asked me to stop with him, and I found him a gentlemanly Turk, who bitterly bewailed his banishment to such an out-of-the-way place. Talking of the Bedawi Ghaza, and the idea so born with the son of the desert that "stolen goods are sweet," he told an *à propos* story of a rich Kurd who stopped at his house in Anatolia. Another man happened to be there with a load of honey. In the early night he heard the Kurd continually getting up and lying down again. Watching what he was about he saw him go to the load of honey, take three dips with his finger, and then come back to his mattress and sleep like a child. On being remonstrated with the next morning he said he could not rest till he had filched a bit.

During the recital of this story I saw Husayn shaykh of the Ghazáwi Arabs, licking his lips in sympathy. His tribe have for some time been constrained to give up forays, and now peaceably cultivate the soil of the ghor. Their appearance, like most of the inhabitants of the ghor and Belka, is more like that of fellahín than Bedawín, as they wear long heavy moustaches and beards: the hair on the true desert Arab's face being generally scanty. Good living has probably much to do with this.

At Beisan I found a broken inscription. It is on limestone, and lies near the Serai.

July 17.—		H. M.	
Baysan to Mazár Abn Faraj.....	1. 10		A tree and tomb, with a few underground huts and matamoras tenanted by melon growers.
„ Rahub .....	1. 0		A small village and spring at the foot of the hills.
„ Roman milestones in Wady Khashineh ...	30		
„ Tyyásir.....	1. 0		Small village to left.
„ Túbás .....	1. 10		Large village; water from wells only.
„ Burj Bardáwil .....	50		Copious springs and mill.
„ 'Ain Fár'a.....	15		Spring; head of Wady Fár'a.
„ Náblus .....	2. 45		
		8. 40	

Along Wady Khashineh I found traces of a paved Roman road as far as Túbás. Here I found wild olive-trees for the first time in Palestine. For two or three miles the hill sides are thickly clothed with them, and such trees and shrubs as *retem* (white broom), hawthorn, wild almond (*el asaf*), caper, *kharrub* (locust-tree), and *sarris* (a common evergreen bush bearing a red berry). Hence some execrable paths led me to the tents at Náblus.

### III.

P. E. F. CAMP, JERA, Aug. 22, 1872.

Having finished the necessary observations from the trigonometrical stations within reach of Náblus on the 6th August, we—that is to say, Lieutenant Conder and myself—went up for a short visit to Jerusalem, leaving the non-commissioned officers to fill in detail.

Our visit there has strengthened my belief that there is still a great deal to be done, and this without any very large outlay. It will be seen from Lieutenant Conder's report that many points which will probably turn out of great value have not hitherto received the amount of attention warranted by their importance. I have great hopes that a few comparatively small excavations which he has planned will, when carried out, be productive of final results.

Up to this time there had been no occasion for any digging in the

country, except for the purpose of opening one or two tombs; which, as I have before mentioned, were unproductive. A few days ago we were told of wonderful remains at a place called Duwaymeh, lying at the eastern base of Mount Gerizim. An inspection of the place showed us two syenite pillars, fifteen feet six inches long, and about two feet in diameter, slightly bulging in the centre, and terminated by a plain fillet and astragal. A third column was taken from this place by Mohammed Saïd, the late pasha, and is now lying near the unfinished barracks between Nâblus and Balâta. There is also a broken column at the former place. Here we determined to dig, and sent to the neighbouring village of Kefr Kallîn for five men, who came and dug without a murmur, and never even asked what they were to be paid. A trench running north and south, at right angles to the two fallen pillars above mentioned, brought us, at the depth of about two feet, to a tessellated pavement of good colours but poor execution, and set in friable cement. The patterns were heart-shaped leaves, twists, and other commonplaces. The cubes are half-inch and consist of white, pale yellow, red, pink, and blue-black limestones. We found other cubes (three-quarter inch) scattered about, but none *in situ*. Pottery was not abundant: only a few fragments of coarse red, and a bit or two with a bad glaze, were turned up. I observed no glass except the mouth of a rude bottle, and one square of glass mosaic, part perhaps of some wall decoration. The workmanship of the pavement in no way equalled that of the pillars, hence the presumption that these latter were brought from some older building—perhaps the Gerizim temple—and made use of in building a Roman villa. A fellah who had been employed to dig by Mohammed Saïd Pasha, told me that the mosaic extended over a space some fifty yards square. In one place a small tank (bath or impluvium?) had been found lined with marble. Sister columns to the above-mentioned exist in a broken state in the ruined church at Jacob's well, and a perfect one lies between Joseph's tomb and the hamlet of Askar. Here, too, an extensive mosaic pavement exists.

The walls of this villa seem to have been simply made of rubble. The columns lay nearly due east and west, and this, joined to the fact that the mosaic beneath has been crushed by their fall, leads to the conclusion that they were overthrown by an earthquake.

The old town of Nâblus seems to have extended much farther east than it does at present. Some vaults were found when digging the excavations of the before-mentioned barracks, which, though unfinished, are rapidly falling to ruin. Several persons, too, in the town declare that they hold title-deeds of shops and houses in the same locality, but I have not been able to obtain a sight of any of these documents. An oblong mound, with traces of a rude wall on the western side, blocks up the mouth of the valley between Balâta and Askar, and if, as some conjecture, the latter represents the name of the old Sychar, which I cannot but consider as separate from Shechem, this

may have been its position. Still it is one of those points which must always remain uncertain from want of evidence either for or against.

Before leaving Nâblus we paid a visit to the Samaritan synagogue, to inspect the famous MSS. Taking off our boots, we entered the synagogue with the old priest Amran, who, without any difficulty, showed us the first MS. This is contained in a brass scroll-case ornamented with a florid arabesque of silver, fastened on in very thin narrow plates. I then asked him to show us the other two rolls—viz., the one said to be written by Abishuah and the next oldest. At this request the old man expressed the utmost surprise, and wished me to believe that this was the real Simon Pure. As, however, on my first visit with Mr. Palmer I had seen two, and on a subsequent visit with Captain Burton three, I was able to assure him that I knew all about them. He then said the key was with his nephew Yakub, who soon appeared, and after a little persuasion showed No. 2, enclosed in a case of workmanship similar to but better than No. 1. On one side of this are depicted the cherubim and altar, the branched candlestick, the pot of manna, Aaron's rod, the flesh-hook, and other sacred utensils.\* A legend round the edge gives the date A.H. 860—or A.D. 1456—(the Samaritans have since, soon after the Mohammedan conquest, dated by the year of the Flight)—and the name of the workman, Yakub ben Fawki, of the town of Damascus. Amran told me that an old tradition states it to be the work of a Damascene Jew. The style of work is distinctly Perso-Damascene, and is still employed in the ornamentation of narghiles, trays, dishes, and other brass ware, by a Persian Jew now living at Damascus. These things are often sold to travellers by the *bric-à-brac* dealers as genuine antiques. Having inspected No. 2, I asked to be shown the real MS. Both the priests immediately exclaimed that there were no more, but I again assured them that I had seen it. Yakub looked nervously at his uncle, and asked what was to be done. Amran shrugged his shoulders and said he did not care. Yakub then asked me why, having seen it once, I wanted to see it again. I replied that Lieutenant Conder had never seen it. He then said that he could not bring it out of its chest.† This was just what suited us, as we were able to see the rolls in their places behind the veil (a white quilted counterpane) and assure ourselves that there were no others. The roll (No. 3) is kept in a case of solid silver of modern workmanship, and has all the appearance of much greater antiquity than either of the other two. It is treated, too, with the greatest respect. On opening it Yakub kept repeating *Destûr* (permission) and *Bismillah* (in the name of God). The evidently real hesitation about showing this roll at once proclaims it to be the one venerated by these Cuthim. It is kept in a cupboard or upright chest with No. 2, No. 1 being in a separate box outside.

\* For photographs of this see the P. E. F. series, Nos. 225—228.

† This can only be done when the high priest is ceremonially clean, and has been that day to the bath.



The roll No. 3 is seldom shown to travellers; in fact, I believe that very few indeed have seen it. But as it is now getting generally known that there are three rolls, I hear that the Samaritans intend getting up a fourth to show instead of No. 3. In course of time they have grown to regard this roll as a fetish, and though they will forswear themselves by the name of God as easily as other orientals, an oath on this is sacred. An anecdote showing the value at which it is held by an intelligent British tourist, was told me on the best authority. A certain Englishwoman, travelling with a firman from the Sultan and at government expense, came to Nâblus, and made arrangements to see the rolls by night, as it was the time of the Passover, and the High Priest was engaged on Gerizim during the day. Having seen it, she presented a backshish of one shilling. Such munificence ought to make us proud of our countrywoman.

There is a curious fact connected with the Samaritans. The whole number of the community is 135 or 136, and of these eighty are males and fifty-five females. Considering the long course of intermarriage practised by these people it is very remarkable, and is tending rapidly to destroy the race, as marriage, either for men or women, with other than their own sect, is strictly forbidden.

There is at Jerusalem, in the possession of Mrs. Ducat, a poor German Jewess, a Samaritan MS. called the "Fire-ried," about which a few notes taken from an account written by Dr. Jacob Frederick Kraus may prove interesting.\*

It is called the "Fire-ried" by the Samaritans from a note at the end of the Book of Numbers to this effect—"It came out from the fire by the power of the Lord to the hand of the king of Babel, in presence of Zerubbabel the Jew, and was not at all burnt. Thanks be to the Lord for the Law of Moses."

It is in the form of a book—not a roll—written on parchment, and contains 217 leaves. It is incomplete at beginning and end, as it commences at Genesis xi. 11, and ends at the beginning of Moses' blessing in Deuteronomy. The pages are 11 by 9 inches. The text is divided into verses and sentences; words at the end of a line are not broken, but—except in the case of the name of the Lord—the letters are spread out to fill up the required space. The letters are rather larger than those in Abishuah's roll (Samaritan No. 3), and some appear to have been gilt. The decalogue is not, as in later MSS., numbered at margin. The paragraphs are not numbered or described as in more modern ones, which, for instance, say, "This is the first book of Moses, containing 250 paragraphs," &c. Dr. Kraus considers these to be two proofs of great antiquity. He goes on to say that Abishuah's roll has a kind of acrostic in the middle of the lines, made by darkening one or more letters. Read down the roll this makes, "I, Abishuah, son of Phineas, son of Eleazar, son of Aaron the priest—the goodwill of the Lord and his glory be on them—have written this holy book in the door of the

\* See photographs Nos. 171—174.

tent of the congregation on Mount Gerizim, in the thirteenth year of the government of the children of Israel in the land of Canaan, with its boundaries round about. I thank the Lord."

The "fire-tried" MS. has no acrostic, but a note at the end of Genesis: "This holy Torah has been established by a wise, valiant, and great daughter" (?) "a good, precious, and intelligent leader, and by a master of all knowledge, from Shelomo son of Saba, a valiant man, a leader of the congregation, and an instructor of his generation, as well by his knowledge as by his intelligence; he was a benefactor and an interpreter of the Torah and a father of blessings; he was of the sons of Nun—may the Lord be gracious to them—and it was appointed to be a thing dedicated to the Lord, that men should read therein with fear and prayer in the house of the High Priest on the tenth day of the seventh month, and this was performed in my presence, and I am Ithamar, son of Aaron, son of Ithamar, the High Priest. May the Lord renew his strength. Amen." Thus far Dr. Kraus.

The MS. was obtained by Mrs. Ducat's late husband in the payment of a bad debt. Owing to the exaggerated price (£1,000) asked for it when brought to England a few years ago it has never been sold. It could now be purchased probably for about £200.

The survey is proceeding most satisfactorily, and in about another month we hope to begin measuring the second base-line on the plain of Esdraelon.

The other day we came across a volcanic outbreak which, as far as I am aware, has never been noticed. It appears beneath and west of Shaykh Iskander, a prominent tomb some nine miles W.N.W. of Jenin. Here I found volcanic clay, nodules of hard black basalt in beds of friable brownish-grey syenite (?). This accounted for the waterworn appearance so often assumed by basaltic boulders, and which had long puzzled me. The character of the superincumbent limestone seemed somewhat changed in places both in colour and texture.

For some distance to the south of this outbreak is a district covered with dense brushwood of *sindian* and *ballut* (*Quercus coccifera* and *Q. pseudococc*), of the *Arbutus andrachne*—locally *kykab*—mixed with a few trees of *kharrub* or locust. To the north, and extending as far as Carmel, is an arid uninhabited waste, treeless and waterless, rugged and pathless, covering perhaps some sixty or seventy square miles, which will take us a month to survey, and we shall doubtless feel glad when it is finished.

---

## NOTICES OF PALESTINE IN THE CUNEIFORM INSCRIPTIONS.

BY GEORGE SMITH.

THE Assyrian cuneiform inscriptions contain some of the most remarkable illustrations of biblical history and geography. During most of the period of the Jewish monarchs, the Assyrians were in direct com-

munication with Palestine; their armies traversed the country, and they conquered and took tribute from many of the kings so well known to us from the Bible narrative.

The earliest monarch whose inscriptions describe any Syrian conquests is Sargon, king of Agane, who reigned at least as early as the sixteenth century B.C.

Sargon, after making other conquests in Elam and Syria, started from his capital, Agane, which was situated near Sippara (the Sepharvaim of Scripture), and advanced to the Mediterranean Sea, on the shore of which he set up a monument to celebrate his victories. Sargon gives a curious account of his own history; according to which his mother, after his birth, placed him in an ark made of rushes and bitumen, and set it afloat on the River Euphrates. In this story there are several points of resemblance to the history of the infancy of Moses.

For several centuries after the expedition of Sargon, we know of no campaigns in Syria; but in the time of Tiglath Pileser I., *cir.* B.C. 1120, the Assyrian arms were carried across the Euphrates, and as far as Palestine. Tiglath Pileser reigned about the time of Eli, Judge of Israel. He defeated some tribes of Hittites, and captured the city of Carchemish; after which he advanced with his army to the slopes of Lebanon, and embarking in a ship of Arvad, killed a dolphin or porpoise in the Mediterranean Sea. The Assyrian empire at this time extended from near Babylon to the Mediterranean, and appeared likely soon to absorb the whole of Palestine; but the Syrians threw off the yoke of Assyria, and an Aramean monarch defeated the Assyrians about 1050 B.C., and drove them again across the Euphrates.

The defeat of Assyria left room for the growth of the power of the Israelites, under the rule of David and Solomon; and the Assyrian empire did not revive until after the death of Solomon, and the breaking up of his dominion.

The career of Assyrian conquest recommenced with Vul-nirari, who ascended the throne B.C. 912. His son Tiglath Ninip, B.C. 890, conquered Naharain; and the next monarch, Assur-nazir-pal, who began his reign B.C. 884, once more crossed the Euphrates.

About B.C. 870, Assur-nazir-pal marched into Syria; he crossed the Euphrates near the city of Carchemish, and Sagara, king of Carchemish, gave him tribute. Passing numerous kingdoms on his way, he then marched to Lebanon, and crossed the Orontes. Here he built a fortress and established an Assyrian garrison. Then skirting the foot of Lebanon he marched to the sea-coast and received presents from Tyre, Zidon, Gebal, Arvad, and other Phœnician cities. No permanent conquest was effected in this expedition, and Assur-nazir-pal died B.C. 859, and was succeeded by his son, Shalmaneser II., who made vigorous efforts to subdue Syria and Palestine.

After five years of war, having conquered all the intermediate countries, Shalmaneser in B.C. 854 advanced into Hamath, ravaging the country and destroying the towns. His advance was interrupted by

the forces of a league of kings of Syria and Palestine, under the leadership of Ben Hadad of Damascus. The army of the confederates was made up as follows:—

2,400 chariots and 20,000 footmen of Ben Hadad of Damascus; 1,400 chariots and 10,000 footmen of Irhulena of Hamath; 2,000 chariots and 10,000 footmen of Ahab of Israel; 500 footmen of the tribe of Goim; 1,000 Egyptian troops; 10 chariots and 10,000 footmen of Irqanata; 200 footmen of Matinu-bahal of Arvad; 200 footmen of Usanata; 30 chariots and 10,000 footmen of Adonibahal of Sizana; 1,000 camels of Gindibuh the Arabian; 10,000 (?) footmen of Baasha, son of Rechab the Ammonite.

Including the charioteers, the whole number of the confederate forces probably amounted to about 85,000 men.

A battle took place on the banks of the Orontes, in which Shalmaneser claims the victory; but the engagement stopped the Assyrian advance, and Shalmaneser returned to Nineveh.

Four years later, B.C. 850, Shalmaneser again advanced against Ben Hadad and his allies, and another indecisive battle took place. The next year, B.C. 849, the war was continued, and in the battle which followed the confederates were defeated with the loss of 10,000 men. This engagement did not open Palestine to Shalmaneser, any more than the others, and in B.C. 846 the Assyrian monarch made a more determined effort; and, raising the whole strength of Assyria, he crossed the Euphrates at the head of 120,000 men. Again he defeated Ben Hadad, but such was the strength of the league that he gained no advantage from his victory.

After this expedition the Syrian league was dissolved. Ben Hadad died, and was succeeded by Hazael. Other changes also had taken place in Palestine: Moab was independent of Israel; and the family of Ahab had been destroyed by Jehu, who now occupied the throne of Israel.

Shalmaneser now renewed his attack, and in B.C. 842 marched against Hazael, king of Damascus. The Syrian monarch posted his troops in a strong position on the mountains of Saniru (the Shenir of the Bible?) in Lebanon, and here he sustained a decisive defeat at the hands of Shalmaneser, 16,000 of the Syrian troops falling in the battle, while 1,591 chariots were captured by the Assyrians. Hazael fled from the battle-field with the wreck of his army, and shut himself up in his capital, Damascus, where he was followed and closely besieged by the Assyrians.

After wasting the neighbourhood, and cutting down the forests for use in the siege, Shalmaneser, unable to take the city, turned into the Hauran and wasted it with fire and sword. Afterwards he marched to the coast of the Mediterranean, to a place called Bahlirahsi, and set up a stele to commemorate his victories. Jehu, who is called "son of Omri," and the King of Tyre and Zidon, now gave tribute to the conqueror.

Three years later Shalmaneser again invaded Syria, but Hazael did not meet him in the open field. This time the Assyrians besieged and captured four cities of Hazael, and received tribute from the kings of Tyre, Zidon, and Gebal. Damascus, however, was not taken, and no road was yet open into Palestine.

The army of Shalmaneser was afterwards in Syria on the Orontes, but no further attempt was made against Damascus, and Shalmaneser died B.C. 823, and was succeeded by his son Samas-vul. Samas-vul carried on war principally in Naharain and Babylonia, and left his crown in B.C. 810 to his son Vul-nirari.

Vul-nirari III., who reigned twenty-nine years, made several expeditions to Syria and Palestine. In one of these he marched against Mariha, king of Damascus, and the Syrian monarch, overcome by fear, admitted him within the walls of the city, and made his submission to Vul-nirari; he likewise paid on the order of the conqueror 2,300 talents of silver, 20 talents of gold, 3,000 talents of copper, 5,000 talents of iron, and various articles of value. The occupation of Damascus by the Assyrians, for the first time opened Palestine to their inroads, and now Vul-nirari received tribute from the land of Omri (Israel), Philistia, and Edom.

Vul-nirari was succeeded in B.C. 781 by Shalmaneser III., who made two expeditions to Syria, one in B.C. 773, to Damascus, and another in the next year, B.C. 772, to Hadrach. No details of these expeditions have been discovered.

On the death of Shalmaneser, Assur-dan III. succeeded in B.C. 771. This monarch marched to Hadrach in B.C. 765 and 755, and to Arpad in B.C. 754, but the details of these expeditions are not known.

Assur-dan was succeeded by Assur-nirari in B.C. 754. Under this king the Assyrian power declined, and his reign was ended by a revolution in B.C. 745, which placed Tiglath Pileser II. on the throne. Tiglath Pileser soon revived the ancient glory of Assyria; he marched to Arpad in B.C. 743, and entering the city after a conflict with the Syrian forces, he received the submission of several of the kings of that region. The king of Syria at that time was Rezin, who is so often mentioned in the books of Kings and Isaiah. A heavy tribute was imposed on Rezin and upon the kings of Tyre, Hamath, and other cities. The next year the Syrians revolted, and Tiglath Pileser marched to Arpad, which he besieged for three years, B.C. 742 to 740, and on the capture of Arpad he advanced against Hamath. The people of Hamath obtained the assistance of Azariah, king of Judah, who sent a force to help them. This army was routed by Tiglath Pileser, who then overran most of Hamath, and annexed a large portion of it to Assyria. During his stay in Syria, Tiglath Pileser received tribute from Menahem, king of Samaria, and the expedition returned to Assyria in B.C. 738.

The Assyrian annals mention another expedition to Palestine by Tiglath Pileser in B.C. 734. The inscriptions of this period are imperfect, but this war appears to correspond with that mentioned in the second



book of Kings and Isaiah, when King Abaz, pressed by Rezin and Pekah, sent to Tiglath Pileser to help him. The commencement of the expedition in the Assyrian account has not been found: the fragments of that record begin with the battle between the forces of Rezin, king of Damascus, and Tiglath Pileser. In this engagement the Syrians were routed, and Rezin fled to Damascus. The Assyrian monarch then ravaged Syria, and laid siege to Damascus with part of his force, while with the rest he marched into the land of Israel. Here he captured and spoiled the cities, carrying the people into captivity. From Israel Tiglath Pileser marched to Philistia. He attacked Askelon, but Mitinti, king of Askelon, who had rebelled, died, and his successor, Rukipti, submitted to Tiglath Pileser. The next place attacked was Gaza. Hanun, the king, fled into Egypt, and Gaza was captured and spoiled. Hanun then came and submitted to Tiglath Pileser. The Assyrians afterwards subdued Samsi, queen of Arabia, and various other princes and tribes, and the war was ended with the capture of Damascus in B.C. 732. Among the tributaries at the close of this campaign occurs the name of Yahuhazi (Ahaz) of Judah. One other event in Palestine is recorded in this reign. Tiglath Pileser states that on the death of Pekah, king of Israel, he established his successor Hoshea on the throne.

On the death of Tiglath Pileser, king of Assyria, B.C. 727, he was succeeded by Shalmaneser IV., who is mentioned in the second book of Kings; but the annals of this monarch have not been discovered, so we have not got the Assyrian version of his relations with Hoshea.

In the year B.C. 722 there was another revolution in Assyria, and Sargon ascended the throne. Samaria having revolted, he, at the beginning of his reign, besieged and captured that city, carrying away captive 27,290 people, and putting an end to the kingdom of Israel. He afterwards, in B.C. 720, crushed a rebellion in Hamath which had spread to Israel and Damascus. In the same year, advancing to the south of Palestine, he subdued the Philistines and Judah, and defeated Sabako of Egypt and Hanun of Gaza at the city of Raphia, where Hanun fell alive into his hand and was carried to Assyria.

Afterwards Sargon, in B.C. 715, received tribute from Pharaoh of Egypt, Samsi, queen of Arabia, and Ithamar the Sabeen, and he transported some of the Thamudites and other rebellious Arab tribes into the cities of Samaria.

In B.C. 711 Sargon was again in Palestine. The people of Ashdod had revolted under Azuri, their king, and were subdued by Sargon in one of his earlier campaigns. Sargon placed Ahimiti, a brother of Azuri, on the throne, but the people of Ashdod revolted against him, and raised a man named Yavan to the throne. Yavan sent to Pharaoh of Egypt and other kings in the neighbourhood to make alliance against Assyria. Egypt at this time well merited the denunciations of Isaiah, for Sargon tells us that after encouraging the others

in their revolt, Pharaoh gave them no help when the Assyrians advanced against Palestine.

In B.C. 711 Sargon marched against Philistia and Judea, but Yavan fled into Egypt on the advance of the Assyrians, and Ashdod and Gimzo were captured and his country subdued. Pharaoh now crowned his treachery by delivering Yavan bound into the hands of Sargon.

Sargon died B.C. 705, and was succeeded by Sennacherib, one of his younger sons. Hezekiah, king of Judah, had revolted against Assyria and attacked the Philistine cities. Sennacherib, in B.C. 701, marched against him. On his way he first attacked Lulia of Zidon, who fled to Cyprus. Sennacherib then took in succession the greater and lesser Zidon, Zarephath, Hosah, Achzib, Accho, and other cities, and placed Tubal on the throne of Zidon. Most of the kings of Palestine now submitted. Their names given by Sennacherib are—Menahem of Samaria; Tubahal of Zidon; Abdalihiti of Arvad; Urumelek of Gebal; Metinti of Ashdod; Buduil of Beth-Ammon; Kemosh-natbi of Moab; Airammu of Edom.

From Phœnicia, Sennacherib advanced to Philistia, where Zidqa, king of Askelon, refused to submit. He deposed Zidqa, and carried him and his family into captivity, placing on the throne Sar-ludari, son of Rukibti, the former king. Beth Dagon, Joppa, Bene Berak, and Azor, which would not yield, were stormed and plundered.

Sennacherib next marched against Ekron, the people of which had submitted to Hezekiah, and had delivered their king Padi into his hands. Ekron was taken and spoiled, and Padi later recovered from Jerusalem and again seated on the throne. The kings of Egypt and Ethiopia having sent an army against Sennacherib, he defeated them at Eltekeh, and spoiled Eltekeh and Timnah.

The Assyrian monarch then gives an account of his attack on Hezekiah, king of Judah. He captured forty-six of the fenced cities of Judah, including Lacish, and there is a series of slabs from the wall of one of the halls of his palace, on which is depicted the storming of this city, while Sennacherib is represented sitting on a throne in the vicinity of Lacish, and receiving the prisoners and spoil. Hezekiah he shut up in Jerusalem, and built towers round the city to prevent his escape. Hezekiah then submitted and gave to Sennacherib 30 talents of gold and 800 talents of silver, besides many rich presents. Sennacherib, in the course of this war, despoiled Judah of considerable portions of its territory and gave it to the kings of Ashdod, Ekron, Askelon, and Gaza. The Assyrian annals have not yielded any trace of the disaster which overtook Sennacherib's army, and he continued his career of conquest for several years after this campaign. Late in his reign, probably about B.C. 688, he made another expedition to Palestine; but the details of this war are most of them lost by the mutilation of the tablet recording it. Sennacherib, in this expedition, penetrated into Arabia and stormed the city of Edom. He carried

captive the Queen of Arabia and the gods of the country, and returned to Assyria in triumph.

In the year B.C. 681 Sennacherib was murdered by two of his sons, and after a contest for the empire, Esar-haddon, a younger son, ascended the throne B.C. 680. When he had arranged the affairs of Babylon, Esar-haddon marched to Palestine, where Abdi Milkutti, king of Zidon, was in revolt. He captured and destroyed the city of Zidon, and then gathered the kings of Palestine and Cyprus who were subject to him. The rulers of Palestine were—

Bahal, king of Tyre; Manasseh, king of Judah; Kemosh-gabri, king of Edom; Muzuri, king of Moab; Zilli-bel, king of Gaza; Mitinti, king of Askelon; Itusamsu, king of Ekron; Melek-asaph, king of Gebal; Kulubahal, king of Arvad; Abibahal, king of Samaria; Puduil, king of Beth Ammon; Numelek, king of Ashdod.

Esar-haddon afterwards passed through Palestine on several occasions, but there are no details of any interest respecting these expeditions.

Esar-haddon appointed his son Assurbanipal king of Assyria in B.C. 668, and soon after died. Assurbanipal, who was the Sardanapalus of the Greeks, directed his first expedition against Egypt, and on his way received tribute from the kings of Palestine who had formerly submitted to his father.

After his second conquest of Egypt, Assurbanipal besieged Bahal, king of Tyre, who had revolted, and the Tyrians, after a long blockade, submitted. Yakinlu, king of Arvad, then gave tribute, but Assurbanipal afterwards deposed him, and placed his eldest son Azibahal on his throne.

During the troubles of the rebellion of Saul-mugina in Babylon, B.C. 651—648, the Arabs under Vahta invaded Palestine and overran Edom, Ammon, the Hauran, Moab, Zobah, and other places. From most of these they were driven out by the forces of Assurbanipal, and a portion of the Arab army under Ammuladin, king of Kedar, was defeated by Kemosh-halta, king of Moab, who sent Ammuladin in chains to Nineveh. In order to chastise the Arabs for their incursions, Assurbanipal sent an expedition to Arabia and made Damascus the basis of his operations. He afterwards punished the cities of Accho and Hosah on the coast of Palestine for revolting against Assyria. These events, which happened about B.C. 640, are the last referring to Palestine given in the Assyrian annals; but many portions of Assyrian history are still unknown to us, and when renewed excavations have supplied the rest of the Assyrian records, we may hope to have much more information on the geography and history of Palestine.

## THE HAMATH INSCRIPTIONS.

TO THE SECRETARY OF THE PALESTINE EXPLORATION FUND.

*Esher, Surrey.*

DEAR SIR,—In answer to your request for some brief explanation of the three remarkable inscriptions which appear in your present number,

I have great pleasure in putting before your readers the following few facts.

The whole of the first line is almost exactly what appeared as three short lines in a late number of your journal; the actual characters are almost identically the same. A close inspection, however, shows that your three short lines were never meant to be read as we should naturally read them, viz., all three from left to right, or all three from right to left. To those who are accustomed to these things the fact is evident that two were read one way, and the middle one a different way. What I have done is, in fact, to transpose the direction of the characters in the middle line. I have also considered that about an inch and a half of the stone (on your scale of printing) has been cut away on one side, and a gap of three inches (on the same scale) will therefore have to appear when the three lines are brought into one. The reason for affirming the existence of this gap will be very evident to any one who considers the third line of your present publication. This line is from another stone altogether. By arranging the whole as in the former case, so as to read it all from left to right, a much smaller gap is here found necessary; but a gap is obviously required in each, as the inscriptions are obviously composed of corresponding elements, which must be arranged one under the other.

Whether the third short line of this third inscription is wanting at Hamath, or has been lost on the transit home, I know not. So precious is every sign in these most important documents that I trust the originals will be examined once again by the light of my arrangements, with a view to the most perfect accuracy and fulness attainable in the transcripts.

The middle line now published your Society has, unfortunately, nothing to do with; why or wherefore I cannot say. I take it altogether from Captain Burton,\* with emendations when obviously necessary. An accurate squeeze of the king's name would probably go far to decide whether my theory of these inscriptions is correct or not.

This theory is that the third set of symbols after the gap in the first line contains quite plainly the Egyptian title of Thothmes III. This spot will be seen by any one who has carefully realised the whole of the above description, to be exactly in the centre of the original stone before the mutilation.

In the second line, exactly under Thothmes, is another Egyptian character which occurs in a king's title of the same dynasty as Thothmes.

The third line in the same central spot has also Egyptian symbols.

Should these views stand the test of criticism, the stones will be 600 years earlier than the famous Moabite stone of Mesha.

I am, yours faithfully,

Sept. 20, 1872.

DUNBAR ISIDORE HEATH.

\* "Unexplored Syria." Burton and Drake.

# LIST OF SUBSCRIPTIONS.

OCTOBER 1ST TO DECEMBER 22ND, 1871.

*a* denotes Annual Subscriber.

\* \* If any omission or mistake be observed in the following lists, the Secretary will be very glad to be informed of it, and will rectify the error in the next *Quarterly Statement*.

	£	s.	d.		£	s.	d.
G. M. E. ....	100	0	0	aRev. J. Phillips .....	0	10	6
aMontague Williams, Esq. ....	1	1	0	A. M. Touch, Esq. ....	0	5	0
aJ. Miland, Esq. ....	1	0	0	aRev. J. Edwards .....	0	10	6
W. Crompton Stansfield, Esq.				aMr. W. Chester .....	1	1	0
(2nd don.) .....	5	0	0	aMajor W. de C. Elmsall.....	1	1	0
aJ. Horniman, Esq. ....	2	2	0	aH. Ker Porter, Esq. ....	1	1	0
Rev. Melsup Hill.....	1	1	0	aA. M. Coleman, Esq. ....	0	10	6
aGen. Ashburnham .....	5	0	0	aRev. Dr. Zimmerman.....	0	10	5
aA. S. Hobson, Esq. ....	1	1	0	aRev. John Monteith .....	0	10	6
aH. Pakenham Edgeworth, Esq.	1	1	0	aMiss Copley .....	1	0	0
aW. Hanks, Esq. ....	1	1	0	aS. Goddard, Esq. ....	1	1	0
aMaj.-Gen. Clarke.....	0	10	0	Per Miss Laura Relton .....	0	10	0
aJ. R. Bedwell, Esq. ....	0	5	0	aJohn Petrie, Esq. ....	1	1	0
aF. H. Peters, Esq. ....	1	1	0	aC. M. G. ....	1	0	0
Miss Davis and Miss Wheatley	5	0	0	aC. R. Norton, Esq. ....	1	1	0
aMiss Griffith.....	1	1	0	Do. ....	1	0	0
aG. Harris, Esq. ....	1	1	0	aT. H. Lawrence, Esq. ....	1	1	0
aMajor Clark .....	1	1	0	Mrs. H. ....	2	0	0
aRev. W. A. Plumptre.....	0	10	0	Rev. H. F. Tozer .....	1	0	0
C. Morrison, Esq. (2nd don.)...	50	0	0	C. B. ....	0	2	0
Lord Talbot de Malahide .....	1	0	0	R. W. Hall Darc, Esq. ....	2	0	0
aCapt. Moody .....	1	1	0	aRev. J. Tucker.....	1	1	0
aRev. E. H. Birley .....	1	1	0	"Penn" .....	5	0	0
aRev. James Gamble .....	1	1	0	Sir Donald MacLeod .....	5	0	0
Per Rev. W. B. Pope. Col-				W. Warren, Esq., 60th Rifles.	2	10	0
lected on board the Tanjore	5	0	0	aE. F. Sewell, Esq. ....	0	10	6
aRev. R. P. Hooper .....	1	1	0	aRev. W. C. Fowle .....	1	1	0
Mrs. Trigg .....	0	2	6	aW. H. Gamlen, Esq. ....	5	0	0
aW. R. Greenwood, Esq. ....	1	1	0	Arthur Hunt, Esq. ....	1	0	0
Do. .... for 1872...	1	1	0	Miss Hunt .....	1	0	0
Prof. Hayter Lewis.....	10	10	0	aC. H. Martin, Esq. ....	2	2	0
aRev. J. Le Mesurier .....	0	10	6	Hon. Otway Toler (6th don.)...	1	1	0
aW. Appleford, Esq. ....	0	10	6	W. Evans, Esq. ....	3	3	0
Major R. Wilmot Brooke .....	1	1	0	Rev. Stephen Hawtry.....	3	0	0
Rev. Robert Harley .....	0	5	0	Miss Leycester (2nd don.) .....	3	0	0
aF. H. Roberts, Esq. ....	0	10	6	aRev. J. M. Lee .....	1	1	0
aRev. J. W. Carr .....	1	1	0	aMiss Enderby .....	1	0	0
aThomas Grant, Esq. ....	1	1	0	T. Carrick, Esq. ....	10	0	0
aMrs. Cheetham .....	1	1	0	J. Kirkpatrick, Esq. (2nd don.			
Claude W. Wyatt, Esq. (a				of 1871).....	1	1	0
£1 1s.) .....	2	2	0	aOliver Ormerod, Esq. ....	1	1	0
G. B. Crewdson, Esq. ....	5	0	0	aV. A. Williamson, Esq. ....	1	1	0



# LIST OF SUBSCRIPTIONS.

	£	s.	d.
aR. B. Martin, Esq. ....	1	1	0
T. Braithwaite, Esq. ....	10	10	0
Henry Charlewood, Esq. ....	5	0	0
aJohn Lloyd, Esq. ....	0	10	0
Mr. Kermore .....	0	10	0
aRev. C. Perry .....	0	10	0
aS. Cotton, Esq. ....	1	1	0
Robert Wildgoose, Esq. ....	1	0	0
aRev. T. M. R. Barnard .....	0	10	0
aT. B. Sanders, Esq. ....	0	10	0
aRev. David Simpson .....	0	10	6
aW. R. N. Glasier, Esq. ....	1	1	0
aRev. R. Wedgwood.....	1	1	0
aD. Matheson, Esq. ....	1	1	0
T. D. Cunningham Graham, Esq. ....	3	0	0
Rev. A. Holborn (£1a) .....	2	0	0
aRev. W. Bilton (for 1872).....	2	0	0
aS. Figgis, Esq. ....	1	1	0
aRev. J. Bleckley .....	1	0	0
aE. H. Penfold, Esq. ....	2	2	0
aMiss Ellen Howes .....	0	10	6
aJoseph Pollard, Esq. ....	1	1	0
aMr. Townsend .....	1	1	0
aMiss Hardcastle .....	1	1	0
aRev. F. Woofenden .....	0	10	6
aJ. E. Cooper, Esq. ....	1	1	0
Per Rev. Llewelyn Jones .....	1	0	0
Lewis Biden, Esq. ....	10	10	0
aJoshua Brough, Esq. ....	1	1	0
aW. Turner, Esq. ....	0	10	6
R. Henderson, Esq. ....	0	10	6
aR. J. Will, Esq. ....	1	1	0
Frederick Puckridge, Esq. (2nd don.) .....	2	2	0
aEugene Stock, Esq. ....	0	10	6
aRev. W. N. Ripley .....	2	2	0
aMrs. W. Tyrwhitt Drake .....	1	1	0
aRev. J. Helmore .....	0	10	0
Do. for 1872 .....	0	10	0
aW. H. Avery, Esq. ....	2	2	0
C. Bond, Esq. ....	1	1	0
aW. M. Hitchcock, Esq. ....	2	2	0
aJames Austin, Esq. ....	2	2	0
aA. J. Peppercorn, Esq. ....	0	10	6
aJ. Peppercorn, Esq. ....	0	10	6
aJ. Cudworth, Esq. ....	1	1	0
aS. H. Curtis, Esq. ....	1	1	0
aJ. Dimmock, Esq. ....	10	0	0
Hastings N. Middleton, Esq. (a £1 1s.) .....	5	0	0
aJohn Reid, Esq. ....	1	1	0
aA. Hardwicke, Esq. ....	1	1	0
aW. Walters, Esq. ....	1	1	0
aW. Bliss, Esq. ....	1	1	0
Sir James Paget .....	1	1	0
aMiss Hornidge .....	0	10	6
aF. Rayner, Esq. ....	1	1	0
aW. B. Young, Esq. ....	1	0	0

	£	s.	d.
aB. Allen, Esq. ....	1	1	0
aHon. and Rev. A. Legge.....	1	1	0
aRev. H. H. Winwood.....	1	1	0
John Laing, Esq. ....	5	0	0
aJ. Walker, Esq. ....	1	1	0
F. T. Lambert, Esq. ....	0	10	6
aRev. Oswald Dykes.....	1	1	0
aMiss Bromehead .....	1	1	0
aRev. J. Caddell.....	1	1	0
Do for 1872 .....	1	1	0
aF. F. Tuckett, Esq. ....	2	2	0

## LOCAL SOCIETIES.

### BEDFORD.

Amount already acknowledged.			
Names of Subscribers.			
Edwin Ransom, Esq. ....	1	1	0
Lieut.-Col. Stuart .....	1	1	0
Dr. Coombs .....	0	10	6
M. Sharman, Esq. ....	0	10	6
T. G. Elger, Esq. ....	0	10	6
Rev. J. W. Haddock .....	0	10	6
Rev. John Brown .....	0	10	6
T. T. Gray, Esq. ....	0	10	6
Joseph Tucker .....	1	1	0
John Usher, Esq. ....	0	10	6
Miss Radley.....	0	10	6
F. Seeborn, Esq. ....	1	1	0
W. Ransom .....	1	1	0

### BIRKENHEAD.

Rev. Philip R. Robin.....	2	2	0
---------------------------	---	---	---

### BRIGHTON.

Per the Hon. Sec. ....	2	16	6
Including the following sub- scriptions:—			
Mrs. Grames .....	£1	0	0
J. N. Winter, Esq. ....	1	1	0
Mrs. Cochrane.....	0	10	6
Miss Wilson.....	0	5	0
Per the Hon. Sec. ....	17	17	6
Including the following sub- scriptions:—			
aMrs. Tuffnell .....	1	1	0
aRev. J. Cooke .....	0	10	0
aRev. N. Crispin ...	0	5	0

# LIST OF SUBSCRIPTIONS.

aRev. T. Mouley ...	£1	1	0
aRev. W. P. Monson	0	5	0
aRev. J. Babington ...	1	1	0
Rev. C. Beanlands ...	0	10	0
aRev. T. W. Baker ...	0	10	0
Rev. H. Beaumont,			
D.D. ....	0	10	0
aRev. F. Watson .....	0	5	0
Rev. F. Reade .....	1	1	0
aRev. S. S. England	0	5	0
aRev. A. D. Wagner	1	1	0
aRev. H. H. Gutle-			
ridge .....	0	5	0
aRev. G. Davies .....	0	5	0
aRev. J. W. Hodgson	0	10	0
aRev. D. O. Winslow	0	10	6
S. A. Hankey, Esq.	10	0	0
Rev. Canon Babing-			
ton .....	1	1	0
Miss Eliza Elliott ...	1	1	0

## BROADSTAIRS.

Per the Hon. Sec. ....			
Including the following sub-			
scriptions:—			
aRev. J. H. Carr ...	0	10	0
aMiss Brown .....	0	5	0
Miss Bell .....	0	5	0
By sale of photo-			
graphs .....	1	6	0

## CHELMSFORD.

Per the Hon. Sec. ....			
------------------------	--	--	--

## DUNFERMLINE.

Per the Hon. Sec. ....			
Including the following sub-			
scriptions:—			
To church door col-			
lection at lecture	6	15	1
Robert Davidson,			
Esq. ....	2	2	0
Kenneth Mathieson,			
Esq. ....	1	0	0
John Landale, Esq.	1	0	0
Thomas Alexander,			
Esq. ....	1	0	0
William Dick, Esq.	1	0	0
Robert Donald, Esq.	1	0	0
David Russel, Esq.	1	0	0

£ s. d.

2 6 0

21 0 0

30 0 0

James Macfarlane,			
Esq. ....	£1	0	0
William Machewson,			
Esq. ....	1	0	0
Henry Reid, Esq. ...	1	0	0
James A. Hunt, Esq.	1	0	0
Rev. William John-			
ston, D.D. ....	1	0	0
Thomas Spowart,			
Esq. ....	1	0	0
Rev. James French	0	10	6
John Ross, Esq. ...	0	10	6
Ralph Walker, Esq.	0	10	6
Patrick F. Soutar,			
Esq. ....	0	10	6
George Wilson, Esq.	0	10	6
William Brown, Esq.	0	10	6
Henry Bardner, Esq.	0	10	6
Messrs. W. & F. Mac-			
Laren .....	0	10	6
George Reid, Esq. ...	0	10	6
Daniel Lamond, Esq.	0	10	6
Rev. Alexander Mit-			
chell .....	0	5	0
William Reid, jun.,			
Esq. ....	0	5	0
Sums under five shil-			
lings .....	0	6	6
Collection at church			
door, Dean Stan-			
ley's lecture .....	19	12	7

## EDINBURGH.

John Watson .....	1	1	0
Mrs. Galloway .....	1	1	0
Mrs. Mill .....	1	0	0
Admiral Sir William Ramsay			
(deceased) .....	1	0	0
John Boyd .....	1	0	0
W. Thompson .....	0	10	6
J. W. Begbie .....	1	1	0
W. F. Burnley .....	1	1	0
John Kennedy .....	1	1	0
William Younger & Co. ....	1	1	0
Lieut.-Col. Barclay .....	1	0	0
Dr. Christison .....	1	1	0
Rev. R. H. Stevenson .....	0	10	6
Robert Haldane .....	0	10	0
James Veitch .....	1	1	0
Rev. C. B. Coney .....	0	10	0
F. Brown Douglas .....	0	10	0
John Macnair .....	0	10	0
William Morrison .....	1	0	0
Sir George Harvey .....	1	0	0
F. C. Anderson .....	0	10	0
Mrs. E. Baxter .....	0	10	0
R. M. Smith .....	1	0	0

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
John Millar .....	1	1	0	Mrs. W. S. Dempster.....	0	5	0
Miss Crooks .....	1	0	0	Rev. Thomas Main .....	0	5	0
Rev. D. Aitken .....	1	1	0	James T. Wilson .....	0	10	0
Miss Muir .....	1	0	0	Mrs. G. R. Cowan .....	0	2	6
Rev. D. Drummond .....	0	10	0	Professor Balfour .....	0	10	0
Rev. J. F. Montgomery .....	0	5	0	A Friend .....	0	2	0
J. Scott Moncrieff .....	0	5	0	James Gall .....	0	2	6
Mrs. D. MacFarlane .....	1	0	0	J. Anderson .....	0	5	0
Rev. G. D. Cullen .....	1	0	0	Rev. F. W. L. Thomas .....	0	5	0
Miss Ferguson .....	0	10	0	William Fraser .....	0	5	0
J. H. Wilson .....	0	5	0	W. L. Cumming .....	0	2	6
Mrs. McLean .....	0	2	6	J. T. Black .....	0	5	0
Mrs. Seton .....	0	5	0	Mrs. Pentland .....	0	2	6
R. Cox .....	2	0	0	Mrs. Wilson .....	0	2	6
J. Horsburgh .....	0	2	6	Mr. Thomson .....	0	2	6
J. Chalmers .....	0	5	0	Miss Russell .....	0	2	6
Misses Kennedy .....	0	2	6	J. Murray .....	0	5	0
R. L. Dymock .....	0	5	0	W. J. Duncan .....	1	0	0
D. Davidson .....	0	5	0	T. G. Muir .....	5	0	0
Mrs. McDowall .....	0	5	0	John M. Balfour .....	0	10	6
Rev. A. Haldane Chinnery ..	1	0	0	James Campbell .....	0	5	0
Mrs. A. Stewart .....	0	5	0	Miss Aire .....	0	2	6
Rev. James McGregor .....	0	5	0	Rev. James Fairbairn .....	0	2	6
T. C. Barrow .....	0	10	0	D. Anderson .....	0	5	0
D. Barton .....	0	10	0	J. A. Jamieson .....	0	10	0
P. Kelland .....	0	5	9	James Carnegie .....	0	5	0
Wm. Tait .....	0	10	6	Robert Younger .....	0	10	0
W. J. Ford .....	1	0	0	William Lyon .....	0	10	0
A Friend .....	0	1	0	Dr. Balfour .....	0	10	0
Mrs. Wood .....	0	2	6	Dr. Muir .....	0	2	6
Mrs. Scott .....	0	2	6	John Morrison .....	0	2	6
Misses Falconer and Mrs. Craigie .....	1	0	0	Angus Macdonald .....	0	2	6
Rev. R. B. Blyth .....	0	2	6	W. G. .....	0	2	6
Mrs. Macfie .....	0	5	0	Mrs. H. J. Muston .....	0	2	6
Miss Monat .....	0	10	0	Rev. J. C. Macphail .....	0	5	0
R. C. Scott .....	0	5	0	James King .....	0	2	6
Rev. A. Moody Stuart .....	0	10	0	Sir F. Outram .....	1	0	0
James Wright .....	1	0	0	George Berry .....	0	5	0
Mrs. Steele .....	0	5	0	D. Leighton .....	0	2	6
T. Smith .....	0	5	0	T. Gibson .....	0	2	6
Mrs. Meek .....	0	5	0	R. Mercer .....	0	2	6
Mrs. Paterson .....	0	5	0	Miss Erskine .....	0	5	0
Dr. MacLagan .....	1	1	0	J. S. W. .....	0	2	6
Dr. Moir .....	1	0	0	J. W. Chisholm .....	1	0	0
James Falshaw .....	1	0	0	Miss Douglas .....	0	10	6
A. Usher & Co. ....	0	10	0	Rev. Alex. Whyte, M.A. ....	1	0	0
P. Guthrie .....	0	5	0	Sir David Baxter, Bart. ....	20	0	0
M. Steven .....	0	5	0	Mrs. John Stewart .....	1	0	0
James Sime .....	0	10	6	John Turnbull (for four years)	4	4	0
Rev. N. Wright .....	0	2	6	J. H. Stewart .....	1	1	0
William Robson .....	0	5	0	Mrs. Oliphant .....	5	0	0
Rev. W. G. Blaikie .....	0	5	0	Rev. W. Maine .....	0	10	0
Dr. A. Anderson .....	0	5	0	Subscriptions received by Geo. St. Clair, Esq. Lecturer, when in Edinburgh :—			
Mrs. Marshall .....	0	5	0	A. F. Somerville .....	1	1	0
Miss MacMillan .....	0	2	6	Miss Somerville .....	1	1	0
Rev. Dr. Peddie .....	0	5	0	John Cowan .....	1	0	0
Rev. D. F. Sandford .....	0	5	0	Rev. John McKerrow .....	0	5	0
Alex. Paton .....	0	5	0				

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
Rev. M. A. Stewart .....	0	2	6	Mrs. Hughes .....	£0	5	0
Mrs. Colonel Macdougall.....	1	1	0	J. A. Brooke, Esq. 1	1	0	0
Miss Macdougall .....	0	10	6	Do. (don.)25	0	0	0
Miss Merritt .....	0	10	6	Colonel Brooke ...	1	1	0
Gilbert Bain .....	1	1	0	Edward Brooke, Esq. 1	1	0	0
Peter Mill .....	0	10	6				
Malcolm Macgregor .....	0	10	6				
Rev. Dr. Macgregor .....	0	10	6				
For amount forwarded to central office, see <i>Quarterly</i> No. IV., new series.							
				LEWES.			
				Per Miss L. Relton .....	0	10	0
FALMOUTH.				MANSFIELD.			
Per A. Lloyd Fox .....	12	11	6	Per J. W. Clarke, Esq. ....	1	11	6
				Including the following subscriptions :—			
				Rev. A. W. Worthington .....	0	10	6
				Mrs. Welfitt.....	1	1	0
FROME.							
αMiss Sewell .....	0	10	0				
				RICHMOND.			
HALSTEAD.				Per R. R. Alexander. ....	4	17	7
Per Rev. J. W. Coombes .....	4	2	6	Including the following subscriptions :—			
Including the following subscriptions :—				αMrs. Cook .....	1	1	0
Rev. J. W. Coombes £1	1	0	0	αDouglas Dent, Esq. 1	0	0	0
αMrs. Pinchbeck ...	1	1	0	αC. Govett, Esq. ...	1	1	0
αD. Sinclair, Esq. ...	0	10	6	Rev. F. N. Oxenham	1	1	0
αMr. C. Portway ...	0	10	6	αJ. C. Sharpe, Esq. 1	1	0	0
αMr. John Blomfield	0	10	6				
Mrs. R. L. Hughes	0	5	0				
Mr. Abbott .....	0	5	0				
Per Rev. S. J. Eales .....	5	16	3				
Including the following subscriptions :—				PERTH.			
Rev. D. Fraser.....	2	2	0	Per the Treasurer .....	15	18	10
Rev. S. J. Eales ...	1	1	0	Including the following subscriptions :—			
T. J. Adams, Esq. 1	1	0	0	Miss Hay, for three years .....	3	0	0
Mrs. Watkinson ...	1	1	0	Do. for Sunday small Subs.	0	8	0
Rev. S. Blackall ...	0	10	0	Mr. Ross, for 1870	1	0	0
Miss Creighton ...	0	10	0	James Duncan, for 1870 .....	1	1	0
				Wm. Ross, for 1871	1	0	0
				Robert Pullar .....	1	0	0
HELENSBURGH.				James Donaldson... 1	0	0	0
αRev. A. Murray M'Callum ...	1	1	0	— Lumsden.....	1	0	0
				J. W. Jameson.....	1	0	0
				Rev. Mr. Scotland ...	0	10	0
HUDDERSFIELD.				David Morton ...	0	10	0
Per Henry Barker, Esq. ....	33	19	0	Robert Robertson	0	10	0
Including the following subscriptions :—				D. H. Stirling, M. D.	0	10	0
J. W. Carlile, Esq	5	0	0	John Bower .....	0	10	0
Thomas Brook, Esq	1	1	0	John Shields.....	0	10	0
				John Jamieson.....	0	10	0

### LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
Comforter & Milne	£0	10	0	Including the following sub-			
James Spottiswoode	0	5	0	scriptions :—			
J. B. Sims .....	0	5	0	Rev. H. Sidebottom	£1	1	0
Rev. Thos. Miller... 0	5	0		C. A. W. Rycroft,			
Neil Reid .....	0	5	0	Esq. ....	0	10	0
Mrs. Newlands ... 0	5	0		Hugh Jackson, Esq.	0	10	0
John McNiell .. ... 0	5	0		T. G. Jackson, Esq.	0	10	0
Wm. Garver .....	0	5	0	Æneas R. M'Donell,			
Rev. James M.				Esq. ....	0	10	0
McOwan .....	0	5	0				
Subscriptions under							
5s. ....	0	17	6				
SCARBOROUGH.				TUNBRIDGE WELLS.			
a Rev. Canon Blunt .....	0	10	6	a Rev. H. Bigsby .....	0	7	6
a Rev. A. S. Aglen.....	0	10	6				
Do. (don.) .....	0	10	0	UXBRIDGE.			
a Rev. J. Bedford .....	0	10	6	Per J. Hunt, Esq. :—			
a J. Rowntree, Esq. ....	0	10	6	Rev. C. P. Price .....	0	5	0
a Hodgson Smith, Esq.....	0	5	0	Miss Robinson .....	0	5	0
G. Bacon, Esq. ....	0	10	6	Miss King .....	0	5	0
a W. Rowntree, Esq.....	0	10	6	J. Hunt, F.R.G.S. ....	0	5	0
a Rev. B. K. Woodd .....	0	10	6				
J. Graham, Esq. (don.) .....	0	10	6				
a C. J. Peacock, Esq. ....	1	1	0	WILLESDEN.			
SEVENOAKS.							
Per J. G. Jackson .....	2	8	0	F. A. Wood, Esq. ....	1	1	0



# LECTURES.

## LIST OF LECTURES.

							Receipts.
By the Rev. Henry Geary—							
November	22.	Bradford-on-Avon	...	...	...	...	£4 0 0
"	23.	Willesden	...	...	...	...	2 18 3
"	24.	Hertford	...	...	...	...	13 11 1
"	20.	Chippenham	...	...	...	...	11 13 10
"	21.	Warminster. (In the Athenæum.)	...	...	...	...	
"	23.	Whitstable	...	...	...	...	3 15 10
December	14.	Tiverton	...	...	...	...	4 1 9
"	12.	Taunton	...	...	...	...	6 0 9
"	13.	Wells	...	...	...	...	
By the Rev. G. St. Clair—							
October	9.	Penrith	...	...	...	...	5 16 0
"	10.	Carlisle	...	...	...	...	10 12 0
"		Hawick	...	...	...	...	6 7 10
"		Galashiels	...	...	...	...	3 8 11
"	13.	Edinburgh	...	...	...	...	7 5 5½
"	16.	Ditto	...	...	...	...	9 18 0
"	17.	Dalkeith	...	...	...	...	4 5 0
"	18.	Linlithgow	...	...	...	...	5 7 4
"	19.	Kirkcaldy	...	...	...	...	9 11 7
"	20.	Cupar	...	...	...	...	14 2 6
"	23.	Coupar-Angus	...	...	...	...	5 13 0
"	24.	Arbroath	...	...	...	...	5 16 1
"	25.	Montrose	...	...	...	...	16 8 2
"	26.	Aberdeen	...	...	...	...	13 1 1½
"	30.	Inverness	...	...	...	...	6 7 6
"	31.	Elgin	...	...	...	...	7 18 9½
November	1.	Forres	...	...	...	...	6 13 11
"	2.	Banff	...	...	...	...	4 3 8½
"	3.	Dundee	...	...	...	...	5 5 10
"	7.	Perth	...	...	...	...	2 12 2½
"	8.	Alloa	...	...	...	...	8 19 2½
"	9.	Glasgow	...	...	...	...	8 2 9¾
"	10.	Ditto	...	...	...	...	9 10 1
"	13.	Ditto	...	...	...	...	4 17 10½
"	14.	Helensburgh	...	...	...	...	9 10 3
"	15.	Dumbarton	...	...	...	...	4 19 6½
"	16.	Alexandria	...	...	...	...	1 8 1
"	17.	Glasgow	...	...	...	...	5 14 7
"	20.	Ditto	...	...	...	...	3 13 6½
"	21.	Port Glasgow	...	...	...	...	4 17 6

## LECTURES.

November	22.	Dunoon...	...	...	...	...	...	£8 14 7
"	23.	Rothsay	...	...	...	...	...	8 12 9
"	24.	Largs	...	...	...	...	...	18 1 1
"	27.	Androssan	...	...	...	...	...	2 18 0
"	28.	Campbeltown	...	...	...	...	...	6 10 1 $\frac{3}{4}$
"	29.	Rutherglen...	...	...	...	...	...	1 16 3
"	30.	Ayr	...	...	...	...	...	6 18 1
Deceniber	1.	Johnstone	...	...	...	...	...	3 15 3
"	4.	Partick...	...	...	...	...	...	8 3 2
"	5.	Kelvinside	...	...	...	...	...	6 18 11
"	6.	Glasgow	...	...	...	...	...	4 3 3
"	7.	Lennoxtown	...	...	...	...	...	0 17 6
"	8.	Irvine	...	...	...	...	...	2 12 7
"	11.	Hamilton	...	...	...	...	...	4 14 4 $\frac{1}{2}$
"	12.	Falkirk...	...	...	...	...	...	4 11 0
"	13.	Peebles...	...	...	...	...	...	2 16 11
"	14.	Selkirk...	...	...	...	...	...	7 13 11
"	15.	Melrose	...	...	...	...	...	6 12 3 $\frac{1}{2}$
"	18.	Jedburgh	...	...	...	...	...	3 9 7 $\frac{1}{2}$

## FROM THE LECTURE LISTS.

These donations are included in the amounts published in the Lecture Lists.

T. B. Saunders, Esq.	...	...	...	...	...	...	...	£0 10 0
R. Smith, Esq.	...	...	...	...	...	...	...	5 0 0
Rev. L. Deedes	...	...	...	...	...	...	...	0 10 0
Mrs. Thornton	...	...	...	...	...	...	...	0 10 0
H. G. Awdry, Esq.	...	...	...	...	...	...	...	0 10 0
aRev. F. R. Sidebottom	...	...	...	...	...	...	...	0 10 0
Joseph Hinton, Esq.	...	...	...	...	...	...	...	0 5 0
Rev. H. Geary	...	...	...	...	...	...	...	2 2 0
aMiss Hewitt...	...	...	...	...	...	...	...	0 10 0
aMiss Stephens	...	...	...	...	...	...	...	0 10 0
aW. Rawlinson, Esq.	...	...	...	...	...	...	...	0 10 0
Mr. Brennan	...	...	...	...	...	...	...	0 5 0
T. J. Shepherd, Esq.	...	...	...	...	...	...	...	0 10 0
aMrs. Clarke	...	...	...	...	...	...	...	0 5 0
aC. H. Graham, Esq.	...	...	...	...	...	...	...	1 1 0
T. Lester, Esq.	...	...	...	...	...	...	...	0 10 6
aJohn Cory, Esq.	...	...	...	...	...	...	...	0 10 6
aC. Fergusson, Esq.	...	...	...	...	...	...	...	0 10 6
aH. Dobinson, Esq.	...	...	...	...	...	...	...	0 10 6
aJohn Nanson, Esq.	...	...	...	...	...	...	...	1 1 0
aRev. Dr. MacRae	...	...	...	...	...	...	...	0 10 6
aRev. John M'Gregor	...	...	...	...	...	...	...	0 10 6
aRev. James Selkirk	...	...	...	...	...	...	...	0 11 7

## LECTURES.

<i>a</i> A. F. Somerville, Esq. ... ..	£1	1	0
<i>a</i> Miss Somerville ... ..	1	1	0
<i>a</i> John Cowan, Esq. ... ..	1	0	0
<i>a</i> Rev. John M'Kerrow ... ..	0	5	0
<i>a</i> Rev. H. A. Stewart ... ..	0	2	6
<i>a</i> Mrs. Colonel MacDougall ... ..	1	1	0
<i>a</i> Miss MacDougall ... ..	0	10	6
<i>a</i> Miss Merritt... ..	0	10	6
<i>a</i> Gilbert Bain, Esq. ... ..	1	1	0
<i>a</i> Mr. T. Mill ... ..	0	10	6
<i>a</i> Rev. Dr. Macgregor ... ..	0	10	6
<i>a</i> Malcolm Macgregor, Esq. ... ..	0	10	6
<i>a</i> Alexander Mitchell, Esq. ... ..	0	10	6
<i>a</i> Rev. D. Douglas Bannermann ... ..	0	10	6
<i>a</i> Miss Macfarlane ... ..	0	10	6
<i>a</i> Patrick D. Swan, Esq. ... ..	2	2	0
<i>a</i> George Hogarth, Esq. ... ..	1	1	0
<i>a</i> Rev. James Cochrane, D.D. ... ..	1	1	0
<i>a</i> Rev. John Laird ... ..	1	1	0
<i>a</i> Rev. G. Mackenzie... ..	0	10	6
<i>a</i> Martin Cooper, Esq. ... ..	0	10	6
<i>a</i> Major-General Dalzell ... ..	1	1	0
<i>a</i> Mr. Fleming ... ..	0	10	6
<i>a</i> Arthur Russell, Esq. ... ..	1	1	0
<i>a</i> Mr. Hood ... ..	0	10	6
<i>a</i> Miss Scott ... ..	0	10	6
<i>a</i> Dr. A. Mackie ... ..	1	1	0
<i>a</i> Provost Nicholson ... ..	0	10	0
<i>a</i> Rev. — Macfarlane... ..	0	10	0
Mr. Hood ... ..	0	5	0
J. R. ... ..	0	2	6
A. Adamson... ..	0	5	0
W. James ... ..	0	5	0
Duncan McNab ... ..	0	5	0
W. Ramsay ... ..	0	5	0
Mrs. McIntyre ... ..	0	2	6
Rev. — Beattie ... ..	0	5	0
Mrs. Alexander Southfield ... ..	0	2	6
Miss Brougham ... ..	0	2	6
Miss Dalgleish ... ..	0	2	6
Rev. — McLellan ... ..	0	2	6
Rev. — Gibb ... ..	0	2	6
Miss Walker... ..	0	2	6
Mr. Black ... ..	0	2	6
Mr. Westwood ... ..	0	5	0
Mr. Brown ... ..	0	5	0
Mr. Duncan ... ..	0	2	6
Mr. Adam ... ..	0	5	0
Mr. Philip ... ..	0	2	6
Mr. Duncan... ..	0	5	0

## LECTURES.

αLord F. Hallyburton	...	...	...	...	...	...	£1	1	0
αVery Rev. Dean Torry	...	...	...	...	...	...	0	10	0
αJohn MacLaren, Esq.	...	...	...	...	...	...	1	1	0
αDavid Corsar, Esq.	...	...	...	...	...	...	1	1	0
David Smith, Esq.	...	...	...	...	...	...	1	1	0
αColonel Kirby	...	...	...	...	...	...	1	1	0
αAndrew Sherer, Esq.	...	...	...	...	...	...	1	1	0
αJohn Morrison, Esq.	...	...	...	...	...	...	0	10	6
αJohn Cruikshank, Esq.	...	...	...	...	...	...	0	10	6
αS. G. T. Toomer, Esq.	...	...	...	...	...	...	0	10	6
αJ. F. Toomer, Esq.	...	...	...	...	...	...	0	10	6
αProvost Mackenzie	...	...	...	...	...	...	0	10	6
αMr. Bailie Simpson	...	...	...	...	...	...	0	10	6
Miss Black	...	...	...	...	...	...	0	10	6
αRev. James Graham	...	...	...	...	...	...	1	1	0
αRev. W. Brown	...	...	...	...	...	...	1	0	0
αT. W. Watt, Esq.	...	...	...	...	...	...	1	1	0
αA. Arrol, Esq.	...	...	...	...	...	...	1	1	0
αM. T. Barlos, Esq.	...	...	...	...	...	...	0	10	6
αDavid Rowan, Esq.	...	...	...	...	...	...	1	1	0
αW. Millar, Esq.	...	...	...	...	...	...	1	1	0
αMiss Kirkwood	...	...	...	...	...	...	0	10	0
αDonald Fisher, Esq.	...	...	...	...	...	...	1	1	0
αR. King, Esq.	...	...	...	...	...	...	0	10	6
αAlexander Stephen, Esq.	...	...	...	...	...	...	1	0	0
αJames M'Lintock, Esq.	...	...	...	...	...	...	0	10	6
αThomas Wharrie, Esq.	...	...	...	...	...	...	1	0	0
αWalter Scobie, Esq.	...	...	...	...	...	...	1	0	0
J. M. Forrester, Esq.	...	...	...	...	...	...	3	3	0
αW. Stodge, Esq.	...	...	...	...	...	...	0	10	6
αRev. T. Wright	...	...	...	...	...	...	1	1	0
αRev. A. Anderson	...	...	...	...	...	...	1	1	0
αA. Breingan, Esq.	...	...	...	...	...	...	1	0	0
αP. B. Junor, Esq.	...	...	...	...	...	...	1	0	0
αJohn Turnbull, Esq.	...	...	...	...	...	...	1	0	0
αMr. Balloch	...	...	...	...	...	...	2	10	0
αJames Turnbull, Esq.	...	...	...	...	...	...	1	1	0
αMrs. Martin	...	...	...	...	...	...	1	1	0
αR. Leslie Smith, Esq.	...	...	...	...	...	...	1	1	0
αJames Mitchell, Esq.	...	...	...	...	...	...	0	10	6
αRev. Robert McMorran	...	...	...	...	...	...	0	10	6
αJ. Duncan, Esq.	...	...	...	...	...	...	0	10	6
αRev. Dr. Elder	...	...	...	...	...	...	0	10	6
James Stevenson, Esq.	...	...	...	...	...	...	5	0	0
αRev. Charles Watson	...	...	...	...	...	...	1	1	0
αRev. J. B. A. McIntyre	...	...	...	...	...	...	1	1	0
αRev. J. Kinross	...	...	...	...	...	...	1	1	0
John Galbraith, Esq.	...	...	...	...	...	...	1	0	0
αW. Mulloch, Esq.	...	...	...	...	...	...	1	0	0
αJames Finlayson, Esq.	...	...	...	...	...	...	0	10	6

# LECTURES.

<i>a</i> W. Scott, Esq. ... ..	£1	1	0
<i>a</i> R. Hunter, Esq. ... ..	1	1	0
<i>a</i> Andrew Wingate, Esq. ... ..	0	10	6
<i>a</i> J. W. Robinson, Esq. ... ..	1	1	0
<i>a</i> Rev. R. S. Sandeman ... ..	0	10	6
<i>a</i> A. Mackenzie, Esq. ... ..	1	1	0
<i>a</i> R. M. Murray, Esq. ... ..	1	1	0
<i>A.</i> Donaldson, Esq. ... ..	1	1	0
<i>a</i> John Pirrie, Esq. ... ..	1	1	0
<i>a</i> Rev. R. Black ... ..	1	1	0
<i>a</i> John Wilson, Esq. ... ..	1	1	0
<i>a</i> Andrew Buchan, Esq. ... ..	1	1	0
<i>a</i> Dr. H. S. Anderson ... ..	1	1	0
<i>a</i> Rev. J. Farquharson ... ..	0	10	6
<i>a</i> G. Turnbull, Esq. ... ..	0	2	6
<i>a</i> Allan Freer, Esq. ... ..	0	10	6
<i>a</i> T. J. Dunne, Esq. ... ..	0	10	6
<i>a</i> Alexander Curle, Esq. ... ..	0	10	6
<i>a</i> W. Elliott, Esq. ... ..	0	10	6
<i>a</i> Rev. M. Mayow ... ..	0	5	0
Rev. J. B. Figgis ... ..	0	5	0
Rev. R. W. Enraght ... ..	0	2	6
Rev. E. Winhan ... ..	0	4	0
<i>a</i> Rev. D. P. Hood ... ..	0	5	0
<i>a</i> Rev. J. H. Cross ... ..	0	10	0
<i>a</i> Somers Clarke, Esq. ... ..	1	1	0



## PUBLICATIONS OF THE SOCIETY.

- Nos. 1 to 6.—The earlier papers, which have mostly been embodied in subsequent publications, are now out of print.
7. Captain Warren's Notes on the Valley of the Jordan and Excavations at Ain es Sultan (Jericho).
8. Dean Stanley's Sermon on the Exploration of Palestine. Price 6d.
- 9—15. Quarterly Statement. Vol. I. Nos. I. to VII.
- These Nos. are now all out of print, except 5, 6, and 7, which contain, among other matter—The History of the Moabite Stone—Captain Warren on Lebanon and the Temples of Cœle-Syria—Captain Warren's Journey to East of Jordan—Letters from Mr. E. H. Palmer—Mr. Simpson on the Royal Quarries—Plan of the Haram Area, showing Excavations—&c., &c.
16. Quarterly Statement. New Series. No. I.
- Contents: Preface—The Desert of the Tih and the Country of Moab, by Mr. E. H. Palmer, with large map and illustrations.
17. Quarterly Statement. New Series. No. II.
- Contents: Map of Moab—Captain Warren on the Plain of Philistia—Dr. Hyde Clarke on the Præ-Israelite Inhabitants of Palestine—Mr. Palmer on the Lebanon—M. Clermont-Ganneau on certain New Discoveries—&c., &c.
18. Quarterly Statement. New Series. No. III.
- The Building of the Mosque of Omar, by E. H. Palmer, Esq.—The Annual Meeting—M. Clermont-Ganneau's New Discoveries in Jerusalem—&c., &c.
19. Quarterly Statement. New Series. No. IV.
- History of the Mosque of Omar, by E. H. Palmer, Esq.—Captain Warren's Latitudes and Longitudes—Mr. Hyde Clarke on the Præ-Israelite Inhabitants of Palestine—&c., &c.
- The Quarterly Statements for 1871 (New Series, Nos. I.—IV.) may be had free by any subscriber for that year of at least half-a-guinea.
20. Quarterly Statement. Jan., 1872.
- Containing Letters and Communications from Mr. Grove, Captain Burton, Rev. F. W. Holland, Mr. C. F. Tyrwhitt Drake, Mr. Samuel Sharpe, Mr. Dugald Campbell, Dr. Alexander Buchan, and Capt. Stewart, R.E.

---

## LOCAL ASSOCIATIONS.

- ALLOA : *Hon. Sec.*—Rev. Alexander Bryson.
- ABERDEEN : *Hon. Sec.*—Rev. Prof. Milligan, D.D.
- ALNWICK : *Hon. Sec.*—Edward Allen, Esq.
- ARBROATH : *Hon. Sec.*—Mr. Anderson.
- ASHFORD : *Hon. Sec.*—F. A. Dewé, Esq.
- AYR : *Hon. Sec.*—Robert Murdoch, Esq.
- BASINGSTOKE : *Hon. Sec.*—Rev. W. Marriner.
- BATH : *Hon. Sec.*—Rev. T. P. Methuen.

## LOCAL ASSOCIATIONS.

- BEDFORD : *Hon. Sec.*—E. W. Ransom, Esq.  
 BIRKENHEAD : *Hon. Sec.*—Rev. A. D. Matthews, St. Aidan's College.  
 BIRMINGHAM : *Hon. Sec.*—Rev. Charles Evans.  
 BLACKBURN : *Hon. Secs.*—Rev. Canon Birch and Rev. A. B. Grosart.  
 BRADFORD : *Hon. Sec.*—Rev. W. Dyson.  
 BRIGHTON : *Hon. Sec.*—Rev. C. E. Douglass.  
 BROADSTAIRS : *Hon. Sec.*—Rev. J. H. Carr.  
 BURNLEY : *Hon. Sec.*—Rev. H. Stamer.  
 BURY ST. EDMUNDS : *Hon. Sec.*—H. Prigg, Esq., Jun.  
 BURY : *Hon. Treas.*—Rev. J. Hornby ; *Hon. Sec.*—Rev. W. Thorburn.  
 CALLINGTON : *Hon. Sec.*—Rev. F. V. Thornton.  
 CAMBRIDGE : *Hon. Sec.*—Rev. T. G. Bonney, Tutor of St. John's College.  
 CARDIFF : *Hon. Sec.*—J. C. Oliver, Esq.  
 CHELMSFORD : *Hon. Sec.*—H. S. Coleman, Esq.  
 CHELTENHAM : *Hon. Sec.*—Dr. E. Wilson.  
 CHESTER : *Hon. Sec.*—The Very Rev. the Dean of Chester.  
 CHIGWELL : *Hon. Sec.*—Rev. H. M. Robinson.  
 CHIPPENHAM : *Hon. Sec.*—A. T. Keary, Esq.  
 CLIFTON and BRISTOL : *Hon. Sec.*—Rev. C. H. Wallace.  
 COUPAR ANGUS : *President*—Very Rev. Dean Torry.  
 CROYDON : *Hon. Sec.*—Mr. Warren.  
 DALKEITH : *Hon. Sec.*—W. Bryce, Esq., M.D.  
 DEVIZES : *Hon. Sec.*—Rev. W. P. S. Bingham.  
 DEVONPORT : *Hon. Sec.*—J. Venning, Esq.  
 DORCHESTER : *Hon. Sec.*—Rev. Handley Moule.  
 DOVER : *Hon. Sec.*—Mr. W. P. Mummery.  
 DUNDEE : *Hon. Sec.*—R. Mackenzie, Esq.  
 DURHAM : *Hon. Sec.*—Rev. J. Dodd.  
 DUNFERMLINE : *Hon. Sec.*—Rev. And. Brydie.  
 EASTBOURNE : *Hon. Sec.*—Rev. H. R. Whelpton.  
 EDINBURGH : *Hon. Sec.*—Rev. W. Lindsay Alexander, D.D.  
 EXETER : *Hon. Sec.*—Rev. Prebendary Acland, Broad Clyst.  
 FALMOUTH, for the County of Cornwall : *Hon. Secs.*—A. Lloyd Fox and W. P. Dymond, Esq.  
 FAVERSHAM : *Hon. Sec.*—Charles Smith, Esq.  
 FORFAR : *Hon. Sec.*—T. Wilkie, Esq.  
 FROME : *Hon. Sec.*—Rev. T. G. Rooke.  
 FOLKESTONE : *Hon. Sec.*—Rev. J. W. Watson.  
 GLASGOW : *Hon. Secs.*—Rev. W. Dickson, D.D., and A. B. M'Grigor, Esq.  
 GLOUCESTER : *Hon. Secs.*—Rev. J. Bowman and F. Cooke, Esq.  
 GREENOCK : *Hon. Sec.*—D. MacDonald, Esq.  
 GUILDFORD : *Hon. Sec.*—Capt. Campbell, R.N.  
 HALIFAX : *Hon. Sec.*—  
 HALSTEAD : *Hon. Secs.*—Rev. S. J. Eales and Rev. J. W. Coombes.  
 HASTINGS : *Hon. Sec.*—T. Dearing, Esq.  
 HELENSBURG : *Hon. Sec.*—Rev. A. Murray McCallum.  
 HERTFORD : *Hon. Sec.*—W. M. Armstrong, Esq.  
 HUDDERSFIELD : *Hon. Sec.*—Henry Barker, Esq., Railway Street, St. George's Square.  
 HULL : *Hon. Sec.*—Dr. Bell.

## LOCAL ASSOCIATIONS.

- HUNTINGDON : *Hon. Sec.*—Rev. Gerald Vesey.  
 INVERNESS : *Hon. Sec.*—Capt. Bolland, R.F.  
 IPSWICH : *Hon. Sec.*—Rev. J. R. Turnock.  
 KETTERING : *Hon. Sec.*—Rev. Theodore M. Owen.  
 KIRKALDY : *Hon. Sec.*—John Barnett, Esq.  
 LEEDS : *Hon. Sec.*—Edward Atkinson, Esq.  
 LEITH : *Hon. Sec.*—A. Davies, Esq.  
 LEWES : *Hon. Sec.*—Rev. R. Straffen.  
 LISKEARD : *Hon. Treas.*—John Eliot, Esq. ; *Hon. Sec.*—Rev. Dr. Ritchie.  
 MALVERN : *Hon. Sec.*—Rev. D. F. A. Grahame.  
 MANCHESTER : *Hon. Sec.*—Rev. W. Crane.  
 MANSFIELD : *Hon. Sec.*—T. W. Clarke, Esq.  
 MARCH : *Hon. Sec.*—Rev. J. Cater.  
 MARGATE : *Hon. Sec.*—Rev. G. Collis.  
 MONTROSE : *Hon. Sec.*—Mr. Mackie.  
 NEWARK : *Hon. Sec.*—Evelyn Falkner, Esq.  
 NEWARK : Ladies' Committee. *Hon. Treas.*—Mrs. Tallents ; *Hon. Sec.*—Mrs. G. Hodgkinson.  
 NEWBURY : *Hon. Sec. pro tem.*—Rev. J. L. Randal.  
 NEWCASTLE : *Hon. Treasurer.*—Thomas Hodgkin, Esq. ; *Hon. Sec.*—W. Lyall, Esq.  
 NEWPORT PAGNELL : *Hon. Sec.*—F. Tayler, Esq.  
 OLNEY : *Hon. Sec.*—W. Hipwell, Esq.  
 OXFORD : *Hon. Secs.*—Rev. Professor Rawlinson and Rev. Edwin Hatch.  
 PAISLEY : *Hon. Sec.*—Rev. J. Dods.  
 PERTH : *Hon. Sec.*—John W. Jameson, Esq.  
 PLYMOUTH : *Hon. Secs.*—J. B. Rowe, Esq., and J. Shelley, Esq.  
 PORTSMOUTH : *Hon. Sec.*—Rev. N. R. Devereux.  
 REIGATE and REDHILL : *Hon. Sec.*—W. Wilson Saunders, Esq.  
 RICHMOND : *Hon. Sec.*—R. R. Alexander, Esq.  
 SCARBOROUGH : *Hon. Sec.*—Rev. A. S. Aglen.  
 SEVENOAKS : *Hon. Sec.*—Graham Jackson, Esq.  
 SOUTHPORT : *Hon. Sec.*—George Lee, Esq.  
 SHERBORNE : *Hon. Sec.*—J. Farmer, Esq.  
 SOWERBY : *Hon. Sec.*—Rev. A. L. W. Bean.  
 ST. ALBANS : *Hon. Sec.*—Rev. W. J. Lawrance.  
 ST. ANDREW'S : *Hon. Secs.*—Dr. Lees and Dr. Mitchell.  
 ST. GERMANS : *Hon. Sec.*—R. Kerswill, Esq.  
 ST. LEONARDS :—Mrs. Alexander, Brunswick House, Marina, has kindly consented to receive subscriptions.  
 STIRLING : *Hon. Sec.*—Rev. W. Taylor.  
 STREATHAM : *Hon. Sec.*—Rev. W. Raven.  
 STROUD : *Hon. Sec.*—T. S. Osborne, Esq.  
 TAUNTON : *Hon. Sec.*—R. J. Shepherd, Esq.  
 TAVISTOCK : *Hon. Sec.*—Mr. Frederick Clarke.  
 TIVERTON : *Hon. Sec.*—Major Stehelin.  
 TUNBRIDGE WELLS : *Hon. Sec.*—Capt. Palmer, R.E.  
 UXBRIDGE : *Hon. Sec.*—J. Hunt, Esq., F.R.G.S.  
 WARMINSTER : *Hon. Sec.*—W. Frank Morgan, Esq.  
 WELLS : *Hon. Sec.*—W. I. Welsh, Esq.

## PHOTOGRAPHS.—MOABITE STONE.—ERRATA.

- WESTON-SUPER-MARE: *Hon. Secs.*—Capt. T. Townsend, R.E., and J. Titley, Esq.  
 WILLESDEN: *Hon. Sec.*—Rev. J. Crane Wharton.  
 WINCHESTER: *Hon. Sec.*—Miss Zornlin.  
 WINDSOR: *Hon. Sec.*—Rev. H. Courtenay Hawtrey.  
 WORCESTER: *Hon. Sec.*—Rev. Francis J. Eld.  
 YARMOUTH: *Hon. Sec.*—Rev. H. R. Nevill.

## PHOTOGRAPHS.

The photographs issued by the Fund can be purchased of Mr. Edward Stanford, 6 and 7, Charing Cross, at the following rates:—

- To Non-Subscribers ... .. 1s. 6d. each.  
 To Annual Subscribers of half-a-guinea ... 1s. 0d. each.

Catalogues and Lists can be obtained at the Agents' or the Society's Offices.

Agents are also established in the different towns, and the Secretary will be glad to hear from any person desirous of undertaking the agency.

## THE "SEAL OF HAGGAI."

Casts of this small seal, which is of very great antiquity, have been taken. They can be procured at 2s. 6d. each.

## THE MOABITE STONE.

Facsimile casts of the small fragments have been taken. They can be procured at cost price.

Photographs (to be obtained of Mr. Edward Stanford)—

- |   |        |
|---|--------|
| 1. One-third size of Captain Warren's tracings (mounted)...     | £0 3 6 |
| 2. Full size of the squeezes themselves, in four photographs... | 2 10 0 |

## ERRATA.

- |                             |                 |                      |  |
|-----------------------------|-----------------|----------------------|--|
| Lecture at Ash.             | April 25, 1871. | By Rev. Henry Geary. |  |
| Proceeds                    | ... ..          | £5 7 6               |  |
| Omitted from last lists—    |                 |                      |  |
| Messrs. Peppercorn Brothers | ... ..          | £1 1 0               |  |





## TREASURER'S STATEMENT.

Owing to the fact that very little work was done by the Fund in the first six months of the year, the subscriptions fell off materially, the whole proceeds from all sources amounting to no more than £2,359 9s. 3d. Of this sum £135 10s. is due to the profit arising from the sale of the "Recovery of Jerusalem." This makes a total of £243 2s. 11d. profit on the book to the end of 1872. It is gratifying to find that a volume so expensive, and necessarily occupied with details which gave it a dry character, should have met with so good a reception. More has been paid in to the credit of the Fund on this account up to date (March 19).

The expenditure of the funds entrusted to the committee is classified as follows:—

Exploration .....	55·62 per cent.
Management .....	21·62   ,,
Returned to subscribers in shape of "Quarterly Statements" (including their postage).....	22·76   ,,

It is satisfactory to add that there is every appearance of the Survey being cordially taken up, subscriptions having already considerably increased.



# LIST OF SUBSCRIPTIONS.

DEC. 24TH, 1871, TO MARCH 19TH, 1872.

*a* denotes Annual Subscriber.

\*. \* If any omission or mistake be observed in the following lists, the Secretary will be very glad to be informed of it, and will rectify the error in the next *Quarterly Statement*.

H.R.H. PRINCE ARTHUR £10 0 0

	£	s.	d.		£	s.	d.
Rev. C. W. Lohr .....	0	5	0	<i>a</i> Rev. J. B. Harrison .....	1	0	0
<i>a</i> A. Lupton, Esq. ....	1	1	0	Mrs. Hancock, Surbiton .....	1	1	0
<i>a</i> Rev. J. D. Lockwood .....	1	1	0	Miss Grove, Surbiton .....	0	10	6
<i>a</i> J. J. Stitt, Esq. ....	1	1	0	<i>a</i> Rev. A. Mackennall .....	1	1	0
S. Holdsworth .....	0	1	0	Ditto (for 1871) .....	1	1	0
Mrs. Hyatt .....	1	1	0	<i>a</i> Robert Baron, Esq. ....	0	10	6
<i>a</i> R. Walton, Esq. ....	2	0	0	<i>a</i> Major-General Nuthall .....	1	0	0
<i>a</i> N. Whitley, Esq. ....	1	1	0	<i>a</i> Rev. William Morton .....	0	10	6
<i>a</i> F. Smith, Esq. ....	1	0	0	Proceeds of Offertory at St.			
Miss F. T. Martin .....	2	0	0	Lawrence .....	2	5	4
<i>a</i> Mrs. Graham .....	1	1	0	<i>a</i> Rev. T. Dalton .....	1	1	0
<i>a</i> Rev. H. T. Ellacombe .....	1	1	0	<i>a</i> S. Hebditch, Esq. ....	0	10	6
<i>a</i> Rev. F. J. A. Hort .....	1	1	0	<i>a</i> S. Hollings, Esq. ....	1	1	0
<i>a</i> J. Dudman, Esq. ....	0	5	0	<i>a</i> H. R. Reynolds, Esq. ....	1	1	0
<i>a</i> H. Peto, Esq. ....	1	0	0	Ditto (for 1871) .....	1	1	0
H. S. B. (per Archbishop of				Per Rev. J. C. Russell .....	1	13	0
York .....	5	0	0	<i>a</i> A. Rae Martin, Esq. ....	1	1	0
Mrs. E. M. Livingston .....	0	10	6	<i>a</i> Rev. G. H. Egerton .....	1	1	0
Rev. J. G. Smyth .....	2	2	0	<i>a</i> J. R. Wigham, Esq. ....	1	1	0
M. Adams .....	1	1	0	<i>a</i> Rev. R. W. Fiske .....	0	5	0
<i>a</i> Alfred Keep, Esq. ....	0	10	6	<i>a</i> G. C. Ashmead, Esq. ....	0	10	6
<i>a</i> Major Speid .....	1	1	0	<i>a</i> A. S. Sloper, Esq. ....	0	5	0
<i>a</i> Rev. John Bowman .....	0	10	6	<i>a</i> Mrs. Seton Karr .....	1	0	0
Arthur Jones, Esq. ....	10	0	0	<i>a</i> H. T. Francis, Esq. ....	2	2	0
<i>a</i> C. Innes Pocock, Esq. ....	1	1	0	<i>a</i> G. O. Wray, Esq. ....	1	1	0
<i>a</i> Rev. G. Stringer Rowe .....	1	1	0	<i>a</i> C. N. Cornish Browne, Esq. ...	2	2	0
<i>a</i> H. S. Redpath, Esq. ....	1	1	0	Miss R. Brown .....	1	0	0
"Noble" (per Union Bank) ...	5	0	0	<i>a</i> Miss Clendenning .....	1	1	0
1872.				Rev. J. McKinnell .....	1	1	0
<i>a</i> Miss Emmett .....	1	0	0	A. H. Heywood, Esq. ....	5	5	0
<i>a</i> Messrs. Philip and Sons (for				W. J. Thompson, Esq. ...	5	0	0
1871) .....	1	1	0	Rev. A. M. Rendell ( <i>a</i> £1 ls.)	2	2	0
Collected by Miss Howorth ...	3	12	0	W. S. W. Vaux, Esq. ....	1	1	0
<i>a</i> Rev. C. H. Hole (for 1871) ...	1	1	0	E. B. E. ....	10	0	0
<i>a</i> Captain Black (for 1871) .....	1	1	0	W. H. Dickenson, Esq. ....	0	10	0
<i>a</i> Rev. G. W. Straton .....	1	0	0	W. H. ....	2	0	0
F. Lupton, Esq. ...	0	10	6	<i>a</i> F. W. Baker, Esq. ....	1	1	0
<i>a</i> Archdeacon of Leighlin .....	1	0	0	<i>a</i> Joseph Hiles, Esq. ....	1	1	0
<i>a</i> Rev. G. Thring .....	1	0	0	Miss Nicholson .....	0	3	0
<i>a</i> Rev. Vernon Musgrave .....	1	0	0	<i>a</i> William Clark, Esq. ....	1	1	0
<i>a</i> W. Pethick, Esq. ....	1	0	0	<i>a</i> L. Jaques, Esq. ....	1	1	0
				Hon. Otway Toler (7th don.)	1	0	0

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
aE. Pewtress, Esq. ....	1	1	0	Do. (don.) .....	3	11	0
aRev. Philpin de Rivière.....	0	2	■	B. Prance, Esq. ....	10	10	0
aRev. T. Blackburne .....	1	1	0	aRobert Jackson, Esq. ....	1	1	0
aRev. C. H. H. Wright .....	0	10	0	aAdmiral Aldham .....	1	1	0
aE. P. Loftus Brock, Esq. ....	1	1	0	aRev. Ed. Wilson.....	0	10	6
aRev. F. L. Moran .....	0	10	0	aRev. G. R. Green .....	1	1	0
Do. (for 1871) ...	0	10	0	Do. (for 1871)...	1	1	0
aRev. J. Hewetson .....	1	1	0	aLord Polwarth .....	2	2	0
Mrs. Brodrick .....	5	0	0	aRev. T. J. Walton .....	0	10	6
aMiss Beaufort .....	1	1	0	aRev. W. R. Bell .....	0	10	6
Colonel Puget .....	0	10	6	aStanley Kempe Welsh, Esq....	1	1	0
aC. J. Angus, Esq. ....	0	10	0	Rev. H. Bailey .....	1	1	0
aT. Osborne, Esq. ....	1	0	0	aG. D. Wingfield Digby, Esq.	10	0	0
aGen. Wilbraham .....	1	1	0	Per Coutts and Co.—			
aJoseph Consterdine, Esq. ....	1	1	0	Miss E. T. Martin .....	0	10	0
aJames McCorkell, Esq. ....	1	1	0	Mrs. Hester Fenwick .....	1	1	0
aF. L. Flint, Esq. ....	0	10	6	Lord C. A. Hervey .....	1	1	0
aRev. T. M. King.....	1	0	■	G. E. Courthope, Esq. ....	1	1	0
aMessrs. Williams and Norgate	1	1	0	Isaac Smith, Esq. ....	0	12	0
aRev. G. Christian .....	1	1	0	aRev. T. W. Carr .....	1	1	0
aMiss M. Clode .....	1	1	0	aRev. R. C. Callendar .....	1	0	0
aRev. G. H. Rouse .....	0	5	0	aMiss L. Barton .....	1	0	0
aMrs. Rouse .....	0	5	0	aC. J. Lacy, Esq. ....	0	10	6
aRev. G. W. Dalton.....	1	1	0	Dean of Graham's Town.....	0	10	0
aRev. Melsup Hill .....	1	1	0	aRev. T. Ladds .....	1	1	0
J. Fernley, Esq. (2nd don.) ...	5	0	■	aRev. J. B. Goldberg .....	0	10	6
The Duke of Marlborough.....	10	0	0	aW. R. Davies, Esq. ....	0	10	6
Lady Buxton .....	5	0	0	aRev. F. Harvey Freeth .....	1	1	0
aRev. C. Potchett .....	1	1	0	Col. W. Lennox, R.E. ....	5	5	0
aMrs. Steele .....	1	0	0	aRev. F. Cruse .....	0	10	6
aJ. D. Grace, Esq. ....	1	1	0	Do. (for 1871) .....	0	10	6
aP. D. Tuckett, Esq. ....	1	1	■	aJ. Simpson, Esq. ....	0	5	0
Mrs. Goddard .....	0	10	0	aRev. Edward Swann .....	1	1	0
aRev. G. W. Studdert.....	1	1	0	Do. (for 1871)	1	1	0
aRev. H. H. Moore .....	1	1	0	Octavius Wigram, Esq. (4th			
Alfred Goodall, Esq. ....	1	1	0	don).....	5	0	0
Rev. E. Moore (2 years).....	2	2	0	Miss M. E. Walker.....	0	10	0
aRev. W. H. Blamire .....	1	1	0	aW. Hilton, Esq. ....	2	0	0
S. H. Hodgson, Esq. ....	1	1	0	Greenwich Church of England			
Rev. O. Williams .....	0	4	0	Sunday School.....	2	2	0
aRev. G. Ommanny .....	1	0	0	aG. H. Fielding, Esq. ....	0	10	0
aMiss Devenish .....	1	1	0	Mrs. Carr .....	2	2	0
aRev. T. Harding .....	1	1	0	John Kirkpatrick, Esq. ....	2	2	0
aA. Powell, Esq. ....	1	1	0	Friends' Book Society, Sunder-			
aD. F. Shillington, Esq. ....	1	1	0	land .....	1	1	0
Miss M.....	0	1	0	Mrs. Hancock .....	1	1	0
aRev. H. L. Distin .....	0	10	■	Do. (for 1871) .....	1	1	0
aRev. W. H. Davey .....	0	10	6	Collected by Miss Turner .....	0	11	0
aC. H. Brown, Esq. ....	0	5	0	aJ. Woodruff, Esq. ....	2	2	0
aF. G. Strickland, Esq. ....	1	1	0	aW. Sandley, Esq. ....	1	1	0
aMiss Pursell.....	0	5	0	aMrs. Cecil Drummond .....	1	1	0
H. S. Pattison, Esq. (a£1 1 0)	2	2	0	aJames Duncan, Esq. ....	1	1	0
aW. H. Montgomerie, Esq.....	1	1	0	aJames Abbot, Esq. ....	1	1	0
Do. (for 1871)	1	1	0	Rev. W. H. Cutler.....	3	0	0
"Island of Arran" .....	0	2	6	aT. Chapman, Esq. ....	1	1	0
aRev. Divie Robertson .....	1	1	0	F. Coleman, Esq. ....	1	1	0
aThomas Turner, Esq. ....	2	2	0	aHyde Clarke, Esq. ....	1	1	0
Miss Erskine .....	5	0	0	aMiss A. Hunter .....	1	1	0
aRev. H. Houghton.....	1	1	0	aRev. W. S. Fowler .....	1	1	0

# LIST OF SUBSCRIPTIONS.

	£	s.	d.
aMrs. W. B. Swainson.....	1	1	0
aRev. G. Austin .....	0	10	6
aWilliam Baker, Esq. ....	1	1	0
aAlfred Denton, Esq. ....	1	1	0
aF. Craven, Esq. ....	1	1	0
aRev. G. F. Watts .....	1	1	0
aW. Moody Blake, Esq. ....	1	1	0
aMrs. Elliot .....	1	1	0
aMiss Gill .....	0	10	6
C. M. Caldecott, Esq. ....	2	2	0
Rev. W. W. Dickinson .....	2	2	0

## LOCAL SOCIETIES.

### ABERDEEN.

Feb. 7.—

By cash remitted...	20	10	0
— Stronach, Esq. ....	1	0	0
Professor Martin .....	1	0	0
W. Edmond, Esq. ....	1	0	0
Prof. Giddes .....	0	10	0
Prof. Black .....	0	10	0
Prof. Milligan .....	0	5	0
John F. White, Esq. ....	0	10	0
Prof. Forbes.....	0	10	0
Jas. Chalmers, Esq. ....	1	0	0
Jas. Aitken, Esq. ....	0	10	0
Rev. H. Clowan .....	0	10	0
G. Jamieson, Esq. ....	0	10	6
James Mackenzie, Esq. ....	0	10	6
Baillie Egmont .....	0	10	6
Dr. Ogston .....	1	0	0
W. Hunter, Esq. ....	0	10	0
Mrs. Thurburn .....	0	10	0
Dr. Corbet .....	0	10	0
Andrew Murray, Esq. ....	0	10	6
John Man, Esq. ....	0	10	0
Thomas Man .....	0	10	0
Capt. Tulloch .....	0	10	0
Rev. Alex. Moir .....	0	10	0
Miss Gow .....	0	10	6
Miss Gurney Gow .....	0	10	6
Miss Black .....	0	10	6
John Smith, Esq. ....			
Ven. Archdeacon Bisset .....			
David Stewart, Esq. ....			
George Thomson, Esq. ....			
W. Henderson, Esq. ....			
Alex. Nicol, Esq. ....			
Lady Anderson .....			
Rev. T. S. Candlish .....			
W. Smart, Esq. ....			
W. Chalmers, Esq. ....			
Rev. R. J. Brown .....			
Mrs. Maclure .....			
David Mitchell, Esq. ....			

	£	s.	d.
Ayr.			
Feb. 19.—By cash remitted ...	7	3	6
BIRMINGHAM.			
Dec. 27, 1871.—			
aRev. C. Evans .....	2	2	0
aW. Jeffs, Esq. ....	1	1	0
BRADFORD.			
Jan. 11.—Henry Brown, Esq.	2	2	0

### BRIGHTON.

Jan. 11.—Mrs. Dykes (4th don.)	5	5	0
Erratum.—For “Miss Eliza Elliott,” read “Miss Effie Elliott.”			

### BURY (LANCASHIRE).

By cash remitted.....	20	0	0
The following is the list :—			
J. R. Kay, Esq., J.P. (£5 in 1869, to serve five years.)			
Thos. Wrigley, Esq., J.P. ....	£1	0	0
S. Porritt, Esq. ....	0	10	0
Rev. James Webb ...	0	10	6
Rev. W. R. Thorburn, M.A. ....	1	0	0
Rev. F. Howorth.....	1	1	0
Rev. J. H. Ouston ...	0	10	6
J. L. Openshaw, Esq., J.P. ....	1	0	0
J. C. Kay, Esq. ....	1	1	0
O. O. Walker, Esq., J.P. ....	1	1	0
John Grundy, Esq. ...	1	1	0
Professor Dowson.....	0	10	0
Richard Bealey, Esq., J.P. ....	1	0	0
David Smith .....	1	1	0
Mr. Richard Butcher	0	10	6
Rev. Canon Hornby	1	1	0
George Wike, Esq. ...	1	1	0
R. N. Philips, Esq., M.D. ....	1	1	0
Mr. Samuel Jackson	0	10	6
Captain Mellor, Esq.	1	1	0
James Porritt .....	1	1	0
James Wrigley.....	1	1	0
Thomas Wrigley, J.P.	1	0	0
Mr. C. M. Merchant	0	10	6
	20	3	6
Expenses.....	0	3	6

20 0 0



# LIST OF SUBSCRIPTIONS.

## BIRKENHEAD.

*Hon. Sec. pro tem.*—Rev. A. D. Mathews.

	£	s.	d.		£	s.	d.
March 11.—By cash remitted	24	15	5				
1871.				1871.			
Sundry expenses: postage,	0	10	3	Miss Thompson .....	0	10	0
cabs, &c. ....				P. A. Williams, Esq. ....	0	10	0
Ward and Foulger's bill (agent	3	11	4	Mrs. Brancker .....	2	0	0
and printer) .....				J. Stower, Esq. ....	0	10	6
1872.				G. R. Livingstone, Esq. ....	0	10	0
Sundries .....	1	15	2	Rev. J. Carter .....	1	0	0
Hire of Music Hall for Birken-				1872.			
head Meeting .....	5	5	0	E. Perrin, Esq. ....	1	1	0
Expenses of Birkenhead Meet-				C. J. Preston, Esq. ....	1	1	0
ing .....	0	9	6	H. Bell, Esq. ....	1	1	0
Small expenses (ten days) .....	0	15	0	H. Bell, Esq., jun. ....	1	1	0
Ward and Foulger's bill .....	5	8	6	J. J. Nixon, Esq. ....	0	10	6
Scragg's bill (Liverpool agent				C. Bushell, Esq. ....	5	0	0
and printer) .....	7	14	0	A. T. Squary, Esq. ....	0	10	0
Paid to Rev. Henry Geary .....	20	9	4	Rev. H. L. Williams .....	0	10	0
Balance transmitted to main				J. Laird, Esq. ....	5	0	0
office* .....	24	15	5	R. Duke, Esq. ....	1	1	0
				S. Stitt, Esq. (don.) .....	5	0	0
				Ditto (sub.) .....	1	1	0
				Mayor of Liverpool .....	5	0	0
				Rev. W. Griffiths .....	1	1	0
				H. Mocatta, Esq. ....	0	10	6
				Rev. J. Fearnell .....	0	10	0
				Rev. W. S. Smith .....	1	10	0
				W. Williamson .....	0	10	0
				P. A. Williams .....	0	5	0
				Rev. J. T. Pearse .....	1	1	0
				Henry Cox, Esq. ....	1	1	0
				Collections—			
				Liverpool Meeting .....	7	1	0
				Birkenhead Meeting .....	8	12	9
				St. Aidan's College (Sermon)...	5	0	0
				Bevington .....	3	0	0
				Oaklands; Cloughton .....	3	18	9
				Rockferry .....	3	15	9
	70	13	6				
				Cash receipts .....	70	13	0

\* This balance is subject to a possible charge for use of Liverpool College Hall, not to exceed £5.

E. and O. E.,

A. D. MATTHEWS,

Hon. Local Sec. pro tem.

March 2nd, 1872.

Examined and compared with the original vouchers and found correct,

JOSEPH T. KINGSMILL,

Assistant Tutor and Chaplain of St. Aidan's.

March 8th, 1872.

Mr. Laird has also promised three £5, in 1873, 1874, and 1875 .....£15 0 0

Other annual subscriptions amount to £15 or £16 annually; say £65 in the four years.

# LIST OF SUBSCRIPTIONS.

## BURY ST. EDMUNDS.

By Sale of Photographs ..... £ 1 8 0

## BURNLEY.

Collected by Miss Howorth ... 3 12 0  
The following is Miss Howorth's list:—

Miss Barnes ..... 0 10 6  
Mrs. A. Dugdale ... 0 10 6  
Miss Howorth ..... 0 10 0  
J. Howorth, Esq. ... 0 10 0  
W. Lomas, Esq. .... 0 5 0  
Mr. J. Massey ..... 0 10 6  
Rev. J. Stroyan (two years) ..... 0 5 0  
Dr. Briggs ..... 0 10 6

## CANADA.

Hon. G. W. Allan of Toronto has kindly undertaken to act as honorary secretary for the society in Canada.

The following donations have been sent by him to the central office:—

Dols.

Christopher Robinson, Esq. ... 5  
The Rev. Professor Whitaker ... 5  
Professor Wilson ..... 5  
John Macdonald, Esq. .... 5  
The Hon. Chief Justice Draper ... 5  
Thomas Reynolds, Esq. .... 10  
The Hon. D. L. Macpherson ... 10  
The Hon. J. Fenier ..... 10  
The Hon. Alex. Morris ..... 5  
The Hon. J. Archers ..... 5  
The Hon. J. Sanborn ..... 5  
The Hon. B. Flint ..... 5  
The Hon. W. McMaster ..... 5  
The Hon. G. W. Allan ..... 5  
Total ..... 85

85 dollars at the present rate of exchange produced £17 8s. 1d. sterling.—G. W. A.

## CAMBRIDGE.

Jan. 1.  
aRev. E. Hill ..... 1 1 0  
aRev. W. E. Pryke ..... 1 1 0  
Feb. 22.—The Master of Clare 2 2 0

## CAMPBELTOWN.

Jan. 6.—By cash. .... 1 13 0  
Sheriff Gardiner .. 1 0 0  
Miss Burrell ..... 0 2 6  
Rev. J. C. Russell... 0 10 6

## CARDIFF.

Jan. 1, 1872.—By cash ..... 10 17 6  
Mr. Jones ..... 0 10 6  
Mr. Elliott ..... 0 10 6  
Miss Alexander ..... 1 1 0  
Captain Johnson ... 0 12 0  
Exhibition (half expenses of lecture) 2 10 0  
Mr. Fry ..... 1 1 0  
J. C. Oliver ..... 1 1 0  
Mr. Ward ..... 1 1 0  
Mr. Ward ..... 0 16 0  
Freemason's Lodge 1 1 0  
Mr. Billups ..... 1 1 0  
Mr. Barry ..... 0 10 6  
Total from donations and subscriptions 11 15 6  
Deducted, stamps, 5s., advertising in West Mail, 13s.

## CHISLEHURST.

Jan. 3.—  
aRev. F. H. Murray ..... 1 1 0

## CHELMSFORD.

Names of subscribers of 10s. and upwards to the Fund:—  
Rev. G. B. Hamilton  
Mr. G. B. Hilliard  
Mr. C. Pertwee  
Rev. J. B. Whiting  
Mr. H. S. Coleman  
Rev. T. Hooke  
Mr. J. Brown, sen.  
Dr. Hare  
Mr. W. W. Perry  
Mr. C. S. Gray  
Ven. Archdeacon Mildmay  
Mr. C. H. Gray  
Mr. R. H. Crabb  
Mr. Veley  
Mr. S. Turner  
Mr. J. S. Reeve  
Mr. A. G. E. Morton  
The Misses Fitch  
Mr. S. Wackrill  
Mr. T. Johns  
Mr. C. Pelley

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
CLIFTON.				DAWLISH.			
Jan. 23rd, by cash remitted.....	8	6	0	Feb. 2nd, Miss Garratt.....	0	10	6
Feb. 21, Do. do. ....	3	1	0	Mrs. Germon.....	0	10	6
Subscriptions for 1871 :—				DORCHESTER.			
Miss Russell.....	1	0	0	<i>Hon. Sec.</i> —Rev. H. C. G. MOULE.			
Mrs. Cornish .....	1	0	0	March 13th, by cash remitted...	3	0	0
Dowager Lady				The sum is made up as follows :—			
Mackworth .....	0	10	0	Rev. T. W. and Mrs.			
Mrs. Mackworth...	0	5	0	Knife .....	0	4	0
Miss Gorham .....	0	10	0	Rev. M. J. Green ...	0	5	0
J. Dermott Thomas	0	10	0	Rev. E. Ludlow.....	1	0	0
T. F. Hore, Esq....	1	0	0	Miss Churchill .....	0	5	0
W. F. Lavington,				Miss E. Churchill...	0	5	0
Esq. ....	1	1	0	E. Pearce, Esq. ....	0	10	0
Miss Douglas .....	0	5	0	Rev. H. C. G. Moule	0	11	0
Miss Ware .....	0	10	0				
Rev. C. H. Wallace	1	0	0				
Less expenses—adver-							
tisement .....	0	5	0				
DARLINGTON.				DOVER.			
Mar. 9, by cash remitted.....	23	13	6	March. 16.—By balance re-			
The following letter has been issued by the Hon. Sec. :—				mitted.....	36	3	3½
PALESTINE EXPLORATION FUND,				Including the following list of			
<i>Darlington Auxiliary.</i>				subscriptions, after deducting			
DEAR SIR.—Having been requested to act as Local Honorary Secretary for the above Fund, I have pleasure in sending you an account of the proposed work, which will, I hope, commend itself to your sympathy and help.				previous remittances, and all expenses connected with the meeting of March 4. An account of the meeting will be found further on.			
Should you kindly favour the fund with your aid, I shall be much obliged if you will fill in the enclosed form of order, on your banker, and return it to me or intimate any other mode of payment you prefer.				1870. March 6.—			
The following Annual Subscriptions for five years have been promised, but I wish to secure a few more before publishing a List :—				Mr. K. Murchison .....	1	1	0
	£	s.	d.	Mr. E. Knocker .....	1	1	0
Mr. Arthur Pease .....	10	0	0	Mr. W. P. Mummery.....	0	10	6
Mr. Charles Pease .....	10	0	0	Rev. J. Bampton.....	0	10	0
Rev. P. W. Grant .....	2	2	0	Mr. A. Birmingham .....	0	10	6
Mr. Greener.....	1	1	0	Colonel Powell.....	0	5	0
Mr. John Morrell .....	1	1	0	Mr. C. Spice.....	0	10	6
Mr. J. P. Pritchett .....	1	1	0	Mr. W. Elsted.....	1	1	0
Mr. Alexander Fothergill ...	0	2	6	Rev. W. E. Light .....	0	10	0
Mr. Deighton .....	0	2	6	Mr. J. Stilwell.....	1	1	0
Hoping to have the pleasure of adding your name,				Captain Harvey, R.E. ....	1	1	0
I remain, dear Sir,				Sir David Russell, C.B. ....	1	0	0
Yours truly,				Captain Macgregor, A.D.C. ...	0	10	0
J. P. PRITCHETT.				Mr. Carter Hughes .....	0	10	0
				Mr. C. Broad (collected).....	0	7	6
				1871. March 6.—			
				Colonel Powell.....	0	5	0
				Mr. A. Birmingham .....	0	10	6
				Mr. E. Knocker .....	1	1	0
				Mr. J. Stilwell.....	1	1	0
				Mr. W. Elsted.....	1	1	0
				Mr. W. P. Mummery.....	0	10	6
				Captain Harvey, R.E. ....	1	1	0
				Rev. W. E. Light .....	0	10	0

### LIST OF SUBSCRIPTIONS.

[illegible]

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
John S. Enys .....	1	0	0	John St. Aubyn,			
R. W. Fox .....	1	1	0	M.P. ....	1	0	0
Charles Fox .....	1	1	0	Colonel Tremayne ...	1	1	0
Samuel Fox .....	1	1	0	Francis Truscott,			
Robert Fox .....	1	1	0	B.A. ....	0	5	0
R. Reynolds Fox.....	1	1	0	P. P. Smith, Esq. ...	1	1	0
A. L. Fox.....	1	1	0	Robert Tweedy .....	1	1	0
John Freeman .....	1	1	0	Rev. R. W. Fookes...	0	10	0
John D. Freeman ...	1	0	0				

## FAVERSHAM.

1871. Dec. 23.—Cash ..... £4 15 0

The following is the list :—

	1869	1870	1871
W. E. Rigden, Esq. ....	£1 1 0		£0 5 0
C. Smith, Esq. ....	0 10 6	0 10 0	0 10 6
Mrs. Rigden .....	...	1 0 0	0 10 0
Rev. C. E. Donne .....	...	0 10 0	0 5 0
Mr. H. Fielding .....	...	0 5 0	0 5 0
Mr. W. Holmes .....	...	0 5 0	0 2 6
Mr. J. A. Anderson, jun. ....	...	0 5 0	0 5 0
Mr. R. W. Smith (5s. a) .....	...	1 6 0	1 1 0
Mr. S. G. Johnson .....	...	0 5 0	...
Mr. S. Higham .....	...	0 5 0	0 5 0
Mr. J. Tassell .....	...	0 5 0	0 5 0
Mr. R. Hilton .....	...	0 5 0	0 5 0
Mr. J. Higham .....	...	0 5 0	0 5 0
Mr. H. White .....	...	0 2 6	...
Mr. G. Robinson .....	...	0 2 6	0 2 6
Mr. L. Shrubsole, jun. ....	...	0 2 6	0 2 6
Mr. R. Wyles .....	...	0 2 0	0 2 6
Mr. Shrubsole .....	...	0 3 0	...
Proceeds of Lecture by Rev. H. Geary, Oct. 18th .....	5 9 0	...	...
J. Warren .....	...	...	0 2 6
H. Anderson .....	...	...	0 2 6
B. Adkins .....	...	...	0 2 6
C. Bryant .....	...	...	0 2 6
To Oct. 1, 1871—			
H. E. Couller .....	...	...	0 5 0
T. J. Geraud .....	...	...	0 2 6
P. Mann .....	...	...	0 5 0
			5 14 0
To advertising, printing, postages, etc. ....			0 19 0
			4 15 0

## GLASGOW.

Jan. 23rd, P. Mackinnon, Esq. ....	10 0 0	Miss Anderson .....	1 0 0
The following is the latest list of subscribers received at the Central Office:—		Miss G. Baillie .....	0 5 0
Alex. Adie, Esq. ....	1 0 0	A. S. Baird, Esq. ....	0 10 6
		Messrs. W. Baird and Co. ....	25 0 0
		J. Barclay, Esq. ....	1 1 0
		Rev. A. A. Bonar .....	3 0 0
		Rev. R. Buchanan, D.D. ....	3 3 0



# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
Dr. Joshua Buchanan.....	2	0	0	R. Napier, Esq., of Shandon...	80	0	0
J. C. Bolton, Esq. ....	5	0	0	Rev. R. S. Oldham .....	1	1	0
Messrs. G. and D. Burns .....	50	0	0	Rev. J. A. Pantus .....	2	2	0
C. H. Bousfield, Esq. ....	5	0	0	Joshua Patteson, Esq. ....	1	0	0
James Bryce, Esq. ....	1	0	0	Alexander Paul, Esq. ....	1	0	0
Messrs. J. and W. Campbell...	20	0	0	Rev. G. Pauline .....	1	1	0
J. B. Cowan, Esq., M.D. ....	3	3	0	Prof. Ramsay .....	3	0	0
Rev. John Caird .....	1	0	0	Messrs. Rutherford Brothers	6	6	0
J. Chalmers, Esq. ....	1	0	0	G. Readman, Esq. ....	5	0	0
R. Chalmers, Esq. ....	1	0	0	G. Reith, Esq. ....	1	0	0
J. Unwell, Esq. ....	1	1	0	Mrs. Skinner .....	1	0	0
Peter Duny, Esq. ....	10	0	0	G. Shields, Esq. ....	0	11	0
J. C. Dick, Esq. ....	0	10	6	Rev. Dr. Smith .....	0	10	6
W. T. Duncan, Esq. ....	1	1	0	Rev. E. Smith .....	0	10	6
Rev. W. P. Dickson, D.D. ....	3	0	0	Rev. A. N. Somerville .....	1	1	0
John Dawson, Esq. ....	1	0	0	A. R. Wood, Esq. ....	1	1	0
Professor Douglas .....	1	1	0	Rev. D. H. Weir, D.D. ....	3	0	0
W. T. Duncan, Esq. ....	1	1	0	C. H. Wilson, Esq. ....	1	1	0
C. A. McEacharn, Esq. ....	0	10	6	Rev. Dr. Alexander Wallace...	5	5	0
John Orr Ewing, Esq. ....	10	0	0	Erratum.—For M. J. Barlos,			
W. Ewing, Esq. ....	10	0	0	Esq., read Miss M. J. Boulds.			
Rev. David McEwan .....	1	1	0				
J. G. Fleming, Esq., M.D. ....	6	6	0				
J. Nichol Fleming, Esq. ....	10	0	0				
Principal Fairbairn .....	3	3	0				
J. M. Ferguson, Esq. ....	7	0	0				
Messrs. Graham and Co. ....	20	0	0				
Misses Gillespie, Cathcart, and Fraser .....	2	2	0				
Dr. W. J. Gairdner .....	1	1	0				
Charles Gairdner, Esq. ....	5	0	0				
John Gould, Esq. ....	1	1	0				
James Hannan, Esq. ....	5	0	0				
John Hamilton, Esq. ....	3	3	0				
W. B. Hodge, Esq. ....	1	0	0				
N. H. Henderson, Esq. ....	0	10	6				
Rev. Dr. Henderson .....	2	0	0				
R. Hutchinson, Esq. ....	1	1	0				
Rev. R. Jameson, D.D. ....	2	2	0				
W. Kerr, Esq. ....	5	0	0				
R. Kerr, Esq. ....	5	0	0				
J. H. Kerr, Esq. ....	1	0	0				
W. Keddie, Esq. ....	0	10	6				
Sir J. Lumsden .....	5	5	0				
Mrs. Lorrimer .....	1	1	0				
J. O. Mitchell, Esq. ....	1	0	0				
Messrs. Mitchell, Allardie, and Mitchell .....	5	0	0				
Rev. J. Monteith .....	1	0	0				
Messrs. A. Meen and Co. ....	5	0	0				
Rev. N. MacLeod .....	2	2	0				
Rev. D. M'Leod .....	1	1	0				
J. M. Maynard, Esq. ....	1	1	0				
Rev. Mr. Maynard .....	1	0	0				
Alexander Moir, Esq. ....	1	1	0				
James Maclehoose, Esq. ....	1	1	0				
James Mitchell, Esq. ....	2	0	0				
Andrew MacLean, Esq. ....	1	0	0				
D. Macfarlane, Esq. ....	1	0	0				
				</			

### LIST OF SUBSCRIPTIONS.

[illegible]

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
aWilliam Garlick, Esq. ....	1	1	0	aThos. Scattergood, Esq. ....	0	10	6
aIsaac Dodgshun, Esq. ....	1	0	0	aMiss Urquhart ...	1	1	0
aRev. T. Whitby, F.R.G.S. ....	1	1	0	aEdward O. Dykes, Esq. ....	1	1	0
aRev. J. E. Car- penter .....	0	10	0	aMiss Dykes and Mrs. Cheape.....	0	10	0
aJ. Laurence, Esq. ....	0	10	6	aW. J. Armitage, Esq. ....	2	2	0
aG. Metcalfe, Esq. ....	1	1	0	aRev. E. R. Con- der.....	1	1	0
aRev. A. Atkinson ....	1	0	0	aMiss Heaton .....	1	0	0
aE. Atkinson, Esq., F.L.S., F.Z.S....	1	1	0	aWm. Ferguson, Esq. ....	0	10	6
aJ. T. Atkinson, Esq. ....	0	10	6	aRev. Thos. Dunn ..	0	10	6

## INVERNESS.

Mar. 19th, by cash remitted .....	14	15	2	<i>By</i>			
Captain G. H. Bolland, R.E.....	1	1	0	Clerking, performed by Sergeant Dedman .....	6	10	0
J. D. Lamb .....	1	1	0	Clerking, performed by Sergeant Ferris .....	6	15	0
C. F. Mackintosh .....	2	2	0	Collecting, performed by Sapper Durward .....	5	0	0
Rev. David Webster .....	0	10	6	Advertising (as per vouchers) ...	13	1	5
Neil Macdonald, Esq. ....	1	0	0	Printing 2,000 forms .....	1	0	6
John Mackenzie, Esq. ....	1	1	0	Purchase of postage wrappers 2,230 at 4s. 10½ per 100) .....	5	8	4½
Andrew Dougall, Esq. ....	1	1	0	Postage Stamps .....	0	4	9½
Joseph Robertson, Esq. ....	1	1	0	Envelopes .....	0	0	9
The Most Rev. the Bishop of Moray and Ross, Primus .....	1	1	0	Money Orders (in payment of ad- vertisements) .....	0	2	0
Rev. George Robson .....	0	10	6	Balance due to Palestine Explora- tion Fund .....	14	15	2
Mr. Thomas Wallace .....	0	10	6				
Lieut. General Cracklow .....	5	5	0				
George G. Duff, Esq. ....	2	2	0				
Dr. Hood .....	5	0	0				
<i>To</i>							
Amount of annual subscription received .....	10	19	6				
Amount of donations received ...	41	18	6				
	52	18	0				
							52 18 0

## MAIDSTONE.

Jan. 22.—				Mr. Benson .....	1	1	0
aJ. Marsh, Esq. ....	0	10	0	Mr. R. W. Wilson ..	1	1	0
aJ. H. Simmonds, Esq. ....	1	1	0	Rev. G. Anson .....	1	1	0
aRev. H. Collis.....	0	10	0	Mr. W. W. Goulden ..	1	1	0
				Mr. Jno. Robinson ..	2	2	0
				Mr. R. Milne Redhead ..	3	3	0
				Mr. D. Foxton .....	1	1	0
				Rev. C. F. Buckby ..	1	0	0
				Mr. Shorthouse .....	1	1	0
				Mr. W. Gough .....	1	1	0
Jan. 15.—By cash remitted.....	40	0	0	Bishop of Manchester ..	2	0	0
The following list also received:—				Rev. R. Tonge .....	1	1	0
Mr. John Lowe.....	1	1	0	Mr. H. Charlewood ..	1	1	0
Rev. W. F. Birch ...	1	1	0	Mr. H. M. Ormerod ..	1	1	0

## MANCHESTER.

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
Mr. E. Burton .....	1	1	0	Collected by Mrs. Prime :—			
Mr. H. Kirkpatrick .....	1	1	0	Mrs. Hall .....	1	1	0
Rev. F. A. Stowell's .....				Mrs. Branston .....	1	1	0
School .....	1	9	2	Mrs. Nicholson .....	0	5	0
Mr. Wilkinson's Card .....	1	7	0	Bradley and Howitt .....	0	5	0
							2 12 0
MARGATE.				Collected by Miss Readhouse :—			
Jan. 2, 1872.—				Mr. H. H. Branston .....	0	10	0
αJ. W. Hitchin Kempe, Esq. ...	1	1	0	Mr. Middleton .....	1	10	0
αF. Towne, Esq. ....	1	1	0	Returned Rail Fare .....	0	5	6
				Rev. J. Muller, M.A. ....	0	5	0
MIDDLESBOROUGH.				Mr. J. Bilson .....	1	0	0
March 13.—				Mrs. A. Taylor .....	0	10	0
αRev. A. Clarke Smith .....	10	6	0	Sale of Photographs .....	0	18	0
				Miss G. Readhouse .....	1	0	0
NEWARK.				Mr. Marsh .....	0	10	6
Jan. 12.—Captain Parker and				Mr. E. Bousfield .....	0	12	0
Miss Parker .....	0	5	0	Mr. H. Walton .....	0	12	0
Feb. 20.—By cash remitted ...	59	19	9	Miss Good .....	0	6	0
March 19.—R. Warwick, Esq.	1	1	0	Master H. Newbald .....	0	10	0
(paid on that day to Miss				Mr. Woodcock .....	0	6	0
Readhouse).				Mrs. Deeping .....	0	5	0
The following lists have been				Mr. D. Bilson, Senr. ....	1	0	0
received from the Ladies'				Captain Sinclair .....	0	5	0
Committee :—				Mr. King .....	0	10	6
Dec., 1871.—Collected by Mrs.							10 15 6
Tallents :				OXFORD.			
Mrs. Kendall .....	1	1	0	Feb. 10.—Rev. T. Rigaud .....	0	10	0
Mr. John Thorpe .....	1	1	0				
Mr. Gilstrap .....	1	0	0	PORTSMOUTH.			
Mrs. Sykes .....	1	1	0	Jan. 26.—F. Ridoutt, Esq. ....	0	10	6
Mr. Tallents .....	1	1	0				
Mr. Mitford Riddell .....	1	1	0	RICHMOND.			
Mr. Godfrey .....	1	1	0	Jan. 24, by cash received .....	10	9	0
Mrs. Branston .....	0	10	0	Including the following subscrip-			
Mrs. Wilson .....	0	10	0	tions :—			
Mrs. Bakewell .....	0	10	0	T. Du Boulay, Esq. ....	1	0	0
Mrs. Clark .....	0	10	0	Lady Onslow .....	2	0	0
Miss Fillingham .....	0	5	0	Rev. J. D. Hales .....	2	0	0
Misses Lawton .....	0	5	0	Rev. W. Hiley .....	1	1	0
				Rev. F. N. Oxenham .....	1	1	0
Collected by Mrs. Hodgkinson :—				The gross proceeds of the lec-			
The Viscountess Os-				ture, previous to paying print-			
sington .....	1	1	0	ing and other expenses, were			11 11 0
Mr. Lammin .....	1	1	0				
Mrs. G. Gilstrap .....	1	1	0	ST. ALBAN'S.			
Mr. G. Hodgkinson,				Jan. 5, by cash .....	1	11	0
M.P. ....	1	1	0				
Mrs. Deeping .....	0	5	0				
Donation, Mrs. Pratt .....	0	5	0				
	4	14	0				

# LIST OF SUBSCRIPTIONS.

TIVERTON.			£	s.	d.				£	s.	d.
Feb. 7, by cash remitted .....			5	17	6	Stationery .....			0	1	3
The following is the list:—						Postage .....			0	9	7
Rev. E. Heighton ... 0	5	0				Cheque to close account for 1871			22	6	0
H. S. Gill, Esq. .... 0	5	0							23	14	0
Mr. R. Bristow ..... 0	2	6				WARMINSTER.					
Rev. J. Dickenson ... 0	5	0				Jan. 15.					
R. Cock, Esq. .... 0	5	0				Rev. R. W. Todd .....			0	10	0
W. Bate .....	0	2	6								
Dr. R. G. Thomas... 0	10	0				WHITBY.					
Mrs. Coward .....	0	5	0			Mrs. C. Richardson .....			0	5	0
Rev. R. Duckworth 0	5	0				Mrs. J. Brewster .....			0	10	0
Dr. S. Smith .....	0	5	0			E. W. Chapman .....			0	10	0
Miss Graham .....	1	0	0								
Major Stehelin .... 0	10	0				WELLS.					
Hindleston Stokes, Esq. ....	0	10	0			December 29.—By cash .....			2	19	0
Rev. E. Baker .....	0	5	0			Mr. Manning .....			5	0	0
Rev. — Jukes ... 0	5	0				C. C. Tudway, Esq. ....			1	0	0
Rev. G. Hadow .....	0	5	0			C. W. Lavington .....			10	0	
Rev. C. A. Fox .....	0	2	6			Proceeds of Mr. Geary's lecture, 13th December 1871.....			5	0	0
Total .....	5	7	■						6	15	0
TORQUAY.						December 27, 1871.—Paid the					
March 14.						Editor of the <i>Wells Journal</i>					
αJ. F. Cobb, Esq. ....	0	10	6			for advertising, &c., per account			10	6	
αMrs. Gott .....	1	1	0			Minute and Cash Book .....			1	2	
TUNBRIDGE WELLS.						Envelopes, postage stamps, &c., for forty-three letters with cir- culars .....			5	8	
Jan. 1, by cash .....	22	6	0			December 13.—Paid printing, and advertising lecture, and			1	8	0
Jan. 10; R. Jansen, Esq. ....	1	1	0			distributing bills .....			18	6	
Annual—						Hall-keeper, gas, &c. ....			8	8	
Right Rev. Bishop Trower.....	1	0	0			Carpenter (Knight).....			3	6	
Rev. C. B. Bowles .....	1	0	0			Envelopes, postages, &c. ....			3	16	0
W. F. Browell, Esq. ....	0	10	0			December 28.—Balances remit- ted per cheque .....			2	19	0
W. B. Maingay, Esq. ....	1	1	0								
Mrs. Fulwar Skipwith .....	1	0	0			WINCHESTER.					
Capt. Spratt, R.N., for 1871-3	3	3	0			Feb. 1.—By cash remitted .....			2	10	0
Donations—						Miss Zornlin (subs.) .....			1	0	0
W. J. Blackburne-Maze, Esq.	2	0	0			Ditto donation to the Survey			1	0	0
Richard Jansen, Esq. ....	2	0	0			of Palestine .....			0	10	0
E. K. ....	5	0	0			Major Oakes.....					
J. Stone Wigg, Esq. ....	5	0	0								
Rev. T. Jennings Bramley, 1871-2 .....	2	0	0								
	23	14	0								
Advertising .....	0	13	0								
Printing bill .....	0	4	2								



## THE DOVER MEETING.

The following is the report, copied from the Dover papers, of the successful meeting held on March 4th under the presidency of H.R.H. Prince Arthur.

On Monday evening, March 4, the ancient Hall of the Dover College was filled by a large and fashionable audience, who assembled to hear a lecture in connection with the Palestine Exploration Fund. The proceedings derived additional interest from the fact that the chair was occupied by his Royal Highness Prince Arthur, K.G., who was accompanied by Sir Howard Elphinstone and Major Pickard, and who, on entering the hall, was received with every demonstration of respect and loyalty, and was loudly cheered on ascending the platform.

His Royal Highness Prince Arthur (who was received with loud cheering), in opening the proceedings, said : Ladies and Gentlemen,—You are all aware of the object of our meeting here to-night, and as the audience is so very numerous—so far greater than I had expected,—I conclude that you not only approve its purport, but, better still, that you intend to give it your assistance and support, and swell the collections on leaving this building. With your kind permission I will say a few words on the subject after the lecture. My object now is to introduce to you Captain Wilson, well-known to everybody who has read about the Palestine explorations (hear, hear). I have no hesitation in saying that the success of the first and of almost all the other expeditions with that object has been mainly due to the tact and the quiet, persevering manner in which he first led the way (hear, hear). To my own personal knowledge he had a most difficult task in overcoming the prejudices of the Mahomedans and the Pashas, but in this he succeeded far beyond all expectations. Seven years ago, when I was at Jerusalem, I had the pleasure of meeting Captain Wilson, whose local knowledge was of the greatest assistance to me, and I now look forward with great pleasure to the lecture with which he is about to favour us (applause).

Captain Wilson, R.E., then delivered his instructive and interesting lecture, and referred at the outset to the spirit of criticism and of examination to which the Bible has of late years been subjected. Some of that criticism had been very severe, many of the critics having dealt with the Holy Word in an adverse spirit that they would not have dared to display with regard to other books ; and it was perhaps owing in some measure to this fact that the Palestine Exploration Fund owed its origin. Its object was to illustrate the Bible—to discover and make known the manners and customs of the former inhabitants of the Holy Land, and to follow so far as possible the wanderings of King David and Saul, the march of the Chaldean army on Jerusalem, and the journeys of our Saviour and his Apostles. When the society was first established the greatest difficulty was found in reconciling the discrepancies in the accounts given by various travellers in Palestine, as they described the same objects in very different ways. The only way, therefore, to reconcile their statements was for the society to make a thorough and complete examination of the Holy Land, which they hoped to effect by a systematic survey from north to south (cheers). One of the most able critics of the Bible, Renan, after visiting the Lake of Tiberias, said, “When I looked upon these places, the marvellous agreement of the natural features of the country with the Bible narrative came upon me as a revelation. It was as if I held in my hand the fifth gospel, by the light of which

I read the other four." It was the fifth gospel that the Society hoped to bring home to every English heart (cheers), and the expense of completing the proposed scheme was comparatively speaking very small, as only £10,000 was asked for, and that sum was a trifling one for a rich country like England (hear, hear). The recent explorations had confirmed one or two doubtful points in Biblical history. A certain celebrated German critic had maintained that the book of Genesis was written by Chaldeans because it mentioned vines, which he said could not have grown in Egypt. However, representations of vines had been found in the tombs explored by the Society, which satisfactorily disproved the accuracy of Von Bunsen's assertion. Again, Theodore Beza contended that a certain officer mentioned by St. Luke could not have held any office in Cyprus; but in the course of their operations the Society discovered at Cyprus the lintel of the doorway with the name of the very officer referred to inscribed on it (applause). The lecturer mentioned several other striking instances in which they had been able to elucidate doubtful points, and proceeded to say that a great deal of light had been recently thrown on the nativity of our Lord, one of the most fiercely contested questions in Biblical chronology; whilst the discovery of the Moabite stone had proved that the Moabites spoke the same language as the Phœnicians, and of other people of the country. A stone had recently been discovered at Jerusalem of a very similar description, and he hoped it would soon be made public. It proved beyond question that the Jews spoke the languages of surrounding nations; and they never found in the records of the wanderings of the patriarchs any instance of their using interpreters until they got to Egypt. It was a most remarkable fact that although the children of Israel were in bondage hundreds of years, they never lost their language, but when taken to Babylon they lost it in seventy years, and at the end of their captivity they adopted a new character, and to a certain extent a new language. Captain Wilson next stated that his special work, in conjunction with Captain Palmer, R.E., Mr. Holland, and Mr. Palmer, the Arabic scholar, was to discover, if possible, the site of the Mount of the Law, and in performing that task he had been much struck by the exactness of the topographical descriptions of the Bible. He remarked that at one time he considered that the story of Sampson and the foxes was rather a curious one; but when he came to travel through Palestine he saw how Samson had been able to destroy the whole of the crops of the Philistines by means of the foxes and the firebrands. They had been able to fix the site of Ai, the topographical description of which in the Bible was most minute, and also the place from which Abraham and Lot viewed the Promised Land (applause). The lecturer went on at some length to give technical details of the explorations of the party of which he formed one, and, alluding to the arduous labours of Captain Warren in Jerusalem, said that they could form some idea of what had been done by that gentleman when he told them that, assisted by only two or three sappers and the Arabs, he sunk shafts 125 feet deep, and carried long galleries from them. During the four years he was in Jerusalem Captain Warren worked very hard and very successfully, under circumstances of peculiar difficulty, owing to the opposition he had to contend with there and the unhealthy character of the place. The climate was a very trying one; and he mentioned that Palestine was the only country in which he suffered from frost-bite. One day whilst out riding the temperature suddenly fell to below freezing point, and a storm came on, accompanied by jagged pieces of ice, before which no one could stand. He could therefore comprehend how the enemies of the Israelites could not stand up

against such storms, for it would not be possible for a regiment of soldiers to fire their rifles whilst they were raging. At the conclusion of his address Captain Wilson resumed his seat amidst loud applause.

His Royal Highness Prince Arthur then said that he was almost ashamed to use the word "introduce" in speaking of Captain Warren, as he had been among the people of Dover so long (hear, hear). Before he commenced he (the Prince) desired to draw attention to the fact that Captain Warren succeeded Captain Wilson in the survey of Palestine, and had most ably carried out the work, especially in the exploration of Jerusalem. The public were all much indebted to him, as he was connected with one of the most charming books that had been brought out on the subject (applause).

Captain Warren, R.E. (who was warmly received) adverted to the imperfect knowledge of the Holy Land displayed by people, and said it was impossible to understand the Bible unless they knew something of the land in which the events it related occurred. It was proposed to make a complete survey of Palestine, and the great object of their holding that meeting was to induce the people of Dover to forward the great work by giving it their sympathy and their substance (applause). He was of opinion that the more people who lived in Palestine the more would it contain, as in the valleys a rich red loam was found, which, placed on the sides of the hills, would form fertile terraces, and thus improve a country which only required a large population and a good government (hear, hear).

His Royal Highness Prince Arthur then said: Ladies and Gentlemen,—I trust I am expressing the feelings of all present in thanking Captain Wilson and Captain Warren for their most excellent addresses. This is a subject in which we ought all to take the deepest interest, as we can never get wearied of listening to accounts about Palestine. Each name is so well known to us, and is so closely associated with our earliest childlike recollections, that we appear to be hearing accounts of our best and truest friends. (Hear.) But it is not my province to-night to trouble you with words on this subject. My duty, on the contrary, is to draw your attention to the object of the meeting, and to ask you kindly to assist the Exploration Fund. I believe that not more than £10,000 is required adequately to complete this praiseworthy and admirable work, but surely such a sum ought easily to be collected in a wealthy country like our own—a country which ought to, and always does, take the lead in all matters connected with the Bible? (Hear hear.) I trust you will show your appreciation of the exertions of the gentlemen who have so kindly been lecturing to us by assisting and giving liberally to the collection which will be made at the doors. I have now much pleasure in introducing to you lastly, but not least, Mr. Morrison who has been, I must say, the leader and mover of the Palestine Exploration Fund. He has devoted himself with the greatest activity to this object. He has visited Palestine two or three times, and not only taken the greatest interest in the work, but has most liberally assisted the undertaking with his purse. His Royal Highness then called on

Mr. Morrison, M.P., Treasurer to the Fund, who addressed the meeting, and on the part of the Committee expressed to Prince Arthur their very warm thanks for taking the chair that night. His Royal Highness was not the only member of the Royal Family to whom they had reason to be grateful, for the Queen was a patron and subscriber, and the interest taken by the Royal Family in the work would be felt wherever the Bible was held dear (applause). He adverted to the

## FROM THE LECTURE LISTS.

fact that the Americans, who, notwithstanding their republican notions, had a great regard for the Royal Family, would be pleased to learn that Prince Arthur was interested in the undertaking, for across the Atlantic they had formed a society with the object of entering into friendly rivalry with the English organisation in exploring the Holy Land (cheers). Mr. Morrison at some length advocated the claims of the Society upon public support, and trusted that it would receive considerable assistance at the hands of the people of Dover.

On the motion of the Rev. W. E. Light, a vote of thanks to the Prince for presiding was carried with enthusiasm.

His Royal Highness said: Ladies and Gentlemen,—I thank you most sincerely for the very kind and cordial manner in which you have received me this evening, and I assure you it has given me great pleasure to preside over meeting like this, the object of which is one so worthy of everybody's assistance.

The Doxology was then sung, and the Prince was loudly cheered on leaving the room.

It is due to the Honorary Secretary for Dover, Mr. W. P. Mummery, to state that the success of the meeting was in a very high degree due to the great personal trouble and care he took in promoting it.

## FROM THE LECTURE LISTS.

**These donations are included in the amounts published in the Lecture Lists. Some of the names will also be found under the head of Local Societies.**

### Maidstone :—

Rev. H. Collis ... ..	£0 10 0
W. H. Simmonds, Esq. ... ..	1 1 0
J. March, Esq. ... ..	0 10 0

### Chislehurst :—

J. Channington, Esq. ... ..	1 0 0
W. H. Moberley ... ..	1 0 0
C. Porter, Esq. ... ..	1 1 0
T. Townend, Esq. ... ..	0 10 0
Mrs. Bussell ... ..	0 2 6
... ..	0 10 0

### Great Stanmore :—

A Donation ... ..	5 0 0
-------------------	-------

### Huntingdon :—

Rev. F. S. Westbrook ... ..	0 5 0
Rev. S. S. Lewis, Corpus Christi College, Cambridge ... ..	1 1 0

### Bury :—

Rev. Canon Hornby ... ..	1 0 0
Per Rev. W. R. Thorburn ... ..	2 7 0

### Manchester :—

Rev. S. A. Steinthal ... ..	2 0 0
Thomas Bagshaw, Esq. ... ..	1 1 0
C. J. Williams, Esq. ... ..	1 1 0
Charles Bailey, Esq. ... ..	1 1 0

FROM THE LECTURE LISTS.

							£	s.	d.
J. L. Moore, Esq.	...	...	...	...	...	...	1	1	0
J. L. M'Master, Esq.	...	...	...	...	...	...	5	0	0
Joseph Ward, Esq.	...	...	...	...	...	...	1	1	0
H. Devonport, Esq.	...	...	...	...	...	...	0	10	6
Staleybridge :—									
J. F. Cheetham, Esq.	...	...	...	...	...	...	2	2	0
Robert Hopwood, Esq., M.D.	...	...	...	...	...	...	1	1	0
Thomas Harrison, Esq.	...	...	...	...	...	...	2	2	0
Liverpool :—									
C. H. Stanley, Esq.	...	...	...	...	...	...	1	1	0
J. H. Simpson, Esq.	...	...	...	...	...	...	1	1	0
Bootle :—									
R. Johnson, Esq., J.P.	...	...	...	...	...	...	1	1	0
James Smith, Esq.	...	...	...	...	...	...	1	1	0
Waterloo :—									
John Scott, Esq.	...	...	...	...	...	...	0	10	6
T. Harrison, Esq.	...	...	...	...	...	...	1	1	0
W. H. Wilson, Esq.	...	...	...	...	...	...	1	1	0
John Mellor, Esq.	...	...	...	...	...	...	0	10	6
St. Helen's, Lancs :—									
J. H. Lyon, Esq.	...	...	...	...	...	...	1	1	0
Thomas Cook, Esq.	...	...	...	...	...	...	1	1	0
Hudson A. Binney, Esq.	...	...	...	...	...	...	0	10	6
John Marsh, Esq.	...	...	...	...	...	...	1	0	0
Huyton :—									
George Edgecombe, Esq.	...	...	...	...	...	...	1	1	0
Morton Sparke, Esq.	...	...	...	...	...	...	1	1	0
Thomas Livesey, Esq.	...	...	...	...	...	...	1	1	0
Over Darwen :—									
Joseph Place, Esq.	...	...	...	...	...	...	1	1	0
Ralph Shorrock...	...	...	...	...	...	...	0	10	6
Rev. J. M. Cramp, D.D. (Wolfville, Nova Scotia)...	...	...	...	...	...	...	1	1	0
Thomas Singleton, Esq. (promised)	...	...	...	...	...	...	5	5	0
Rev. J. M'Dougall (promised)	...	...	...	...	...	...	1	1	0
Rev. W. H. Blamire	...	...	...	...	...	...	1	1	0
Rev. H. H. Moore	...	...	...	...	...	...	1	1	0
Middleton :—									
Richard Livsey, Esq.	...	...	...	...	...	...	0	2	6
Alderley :—									
Joseph Wood, Esq.	...	...	...	...	...	...	1	1	0
S. Thorp, Esq.	...	...	...	...	...	...	0	10	6
Joseph Thompson, Esq.	...	...	...	...	...	...	2	2	0
Oldham :—									
Rev. R. M. Davies	...	...	...	...	...	...	1	1	0
Chorley :—									
William Cairns, Esq.	...	...	...	...	...	...	1	1	0
Richard Aslin, Esq.	...	...	...	...	...	...	0	15	0
Rochdale :—									
G. T. Kemp, Esq.	...	...	...	...	...	...	5	0	0



FROM THE LECTURE LISTS.

							£	s.	d.
Bradford :—									
R. Goddard, Esq.	...	...	...	...	...	...	0	10	6
R. W. Goddard, Esq.	...	...	...	...	...	...	0	10	6
W. Parker, Esq.	...	...	...	...	...	...	1	1	0
William Nuttall, Esq.	...	...	...	...	...	...	0	10	6
Burnley :—									
Collected by F. Grant, Esq.	...	...	...	...	...	...	2	2	6
Back Lane School, F. Grant, Esq., Secretary (promised)	...	...	...	...	...	...	1	1	0
Blackburn :—									
Mr. Alderman Baynes	...	...	...	...	...	...	0	10	6
Rev. C. W. Woodhouse	...	...	...	...	...	...	0	10	6
Rev. A. B. Grosart	...	...	...	...	...	...	0	10	6
Rev. Canon Birch	...	...	...	...	...	...	1	1	0
R. Edmondson, Esq.	...	...	...	...	...	...	1	1	0
Halifax :—									
Thomas Hirst Bracken, Esq.	...	...	...	...	...	...	1	1	0
Darlington :—									
Arthur Pease, Esq.	...	...	...	...	...	...	10	0	0
Charles Pease, Esq.	...	...	...	...	...	...	10	0	0
J. P. Pritchett, Esq.	...	...	...	...	...	...	1	1	0
Rev. P. W. Grant	...	...	...	...	...	...	2	2	0
Mr. T. Green	...	...	...	...	...	...	1	1	0
Mr. Alexander Fothergill	...	...	...	...	...	...	0	10	6
Mr. John Morell	...	...	...	...	...	...	1	1	0
West Hartlepool :—									
George Pyman, Esq.	...	...	...	...	...	...	2	2	0
Alnwick :									
James Ewing, Esq.	...	...	...	...	...	...	1	1	0
Richmond :—									
Rev. William Strickland	...	...	...	...	...	...	1	1	0
South Shields :—									
John Williamson, Esq.	...	...	...	...	...	...	5	0	0
Archibald Stevenson, Esq.	...	...	...	...	...	...	1	1	0
Middlesborough :—									
Thomas Brentnall, Esq.	...	...	...	...	...	...	0	10	6
J. F. Wilson, Esq.	...	...	...	...	...	...	0	10	6
T. Vaughan, Esq. (promised)	...	...	...	...	...	...	5	0	0
Stockton-on-Tees :—									
C. Bone, Esq.	...	...	...	...	...	...	1	1	0
E. Alexander, Esq.	...	...	...	...	...	...	1	1	0
Thomas Whitwell, Esq.	...	...	...	...	...	...	5	5	0
Dr. Joseph Laidler	...	...	...	...	...	...	1	1	0
York :—									
Rev. J. Kenrick, F.S.A.	...	...	...	...	...	...	1	1	0
Dr. Shann	...	...	...	...	...	...	1	1	0
William Whytehead, Esq.	...	...	...	...	...	...	2	0	0
Rev. A. R. Fausset	...	...	...	...	...	...	1	1	0
W. Gray, Esq.	...	...	...	...	...	...	2	2	0
William Raimes, Esq.	...	...	...	...	...	...	5	5	0
William Phillips, Esq.	...	...	...	...	...	...	1	1	0

## LECTURES.

							£	s.	d.
T. S. Noble, Esq.	...	...	...	...	...	...	1	1	0
Rev. Canon Hey	...	...	...	...	...	...	1	1	0
Normanby :—									
Rev. W. Ward Jackson, M.A., J.P.	...	...	...	...	...	...	0	10	0
Rev. Charles Bailey	...	...	...	...	...	...	0	10	6

## MEETINGS AND LECTURES.

RICHMOND: Thursday, Jan. 18.—Addressed by Prof. Palmer.

DOVER: March 4.—Chairman, H.R.H. Prince Arthur. Addressed by Captain Wilson, Captain Warren, and Mr. Morrison, M.P.

## LIST OF LECTURES.

							Receipts.		
							£	s.	d.
By the Rev. A. E. Northey—							...	5	7 0
January 22nd.	Sevenoaks	...	...	...	...	...	...	5	7 0
By the Rev. Henry Geary—							...	...	...
January 9.	Canterbury	...	...	...	...	...	...	8	9 3
„ 19.	Maidstone	...	...	...	...	...	...	11	0 3
February 20.	Chislehurst	...	...	...	...	...	...	6	13 6
March 5.	Great Stanmore	...	...	...	...	...	...	12	9 0
„ 19.	Huntingdon	...	...	...	...	...	...	4	13 0
By the Rev. G. St. Clair—							...	...	...
January 8.	Bury, Lancs.	...	...	...	...	...	...	5	15 7½
„ 9.	Manchester	...	...	...	...	...	...	2	3 5
„ 10.	Staleybridge	...	...	...	...	...	...	8	8 0
„ 11.	Earlestown	...	...	...	...	...	...	6	13 0
„ 15.	Bootle, Liverpool	...	...	...	...	...	...	6	16 7
„ 16.	Liverpool	...	...	...	...	...	...	4	7 0
„ 17.	Manchester	...	...	...	...	...	...	4	18 4
„ 18.	Waterloo	...	...	...	...	...	...	8	7 9
„ 19.	St. Helens, Lancs.	...	...	...	...	...	...	7	7 6½
„ 22.	Blackpool	...	...	...	...	...	...	3	13 0
„ 23.	Huyton	...	...	...	...	...	...	9	13 10¼
„ 24.	Liverpool	...	...	...	...	...	...	4	16 7½
„ 26.	Liverpool	...	...	...	...	...	...	1	9 0½
„ 29.	Middleton, Lancs.	...	...	...	...	...	...	3	12 6
„ 30.	Lytham	...	...	...	...	...	...	6	6 5½
„ 31.	Manchester	...	...	...	...	...	...	12	18 10
February 1.	Liverpool	...	...	...	...	...	...	0	5 0
„ 2.	Over Darwen	...	...	...	...	...	...	9	17 6
„ 12.	Alderley	...	...	...	...	...	...	11	15 4
„ 13.	Manchester	...	...	...	...	...	...	14	15 8¼
„ 14.	Oldham	...	...	...	...	...	...	5	15 5

# LECTURES.

								£	s.	d.
February	15.	Chorley	...	...	...	...	...	4	12	6
"	19.	Rochdale	...	...	...	...	...	9	4	9½
"	20.	Bradford	...	...	...	...	...	4	10	0
"	21.	Burnley	...	...	...	...	...	17	3	9½
"	22.	Blackburn	...	...	...	...	...	10	14	6
"	23.	Halifax	...	...	...	...	...	4	12	4½
"	27.	Normanby	...	...	...	...	...	3	12	1
"	28.	Darlington	...	...	...	...	...	5	16	3
"	29.	West Hartlepool	...	...	...	...	...	3	10	5½
March	1.	Alnwick	...	...	...	...	...	4	17	2
"	4.	Richmond, Yorks.	...	...	...	...	...	5	15	6
"	5.	South Shields...	...	...	...	...	...	16	15	5
"	6.	Middlesborough	...	...	...	...	...	4	19	3
"	7.	Stockton-on-Tees	...	...	...	...	...	20	1	6
"	8.	York	...	...	...	...	...	21	13	10

## ERRATA TO LIST OF LECTURES.

In list of Lectures the following was omitted :—

November 6. Forfar ... .. £2 13s. 8½d.

In list of subscribers from the Lecture Lists the following corrections should be made :—

Instead of	Martin Cooper, Esq.	...	read	Ambrose Cooper, Esq.
"	Major-General Dalzell	...	"	Major-General Dalzell.
"	Rev. Macfarlane	...	"	Rev. M'Farlane.
"	W. James...	...	"	W. Innes.
"	Mrs. Alexander, Southfield	...	"	Mrs. Alexander, of Southfield.
"	Mr. Westwood	...	"	Mr. Brown, of Westfield.
"	Mr. Brown, 5s.	...	delete	
"	Lord F. Hallyburton, £1 1s.	...	read	£1.
"	John Morrison, Esq.	...	"	John Morison, Esq.
"	T. W. Watt, Esq.	...	"	J. M. Watt, Esq.
"	M. T. Barlos, Esq.	...	"	M. J. Barlos, Esq.
After	J. M. Forrester, Esq.	...	insert	£1 annually for three years.
Instead of	W. Stodge, Esq.	...	read	W. Hodge, Esq.
"	John Turnbull, Esq., £1	...	"	£1 1s.
"	Mr. Balloch, £2 10s.	...	"	10s.
"	J. Duncan, Esq.	...	"	Charles Duncan, Esq.
"	Rev. J. B. A. M'Intyre	...	"	Rev. J. B. K. M'Intyre.
"	Rev. J. Kinross	...	"	Rev. J. Kinross, M A.
"	W. Mulloch, Esq.	...	"	W. Malloch, Esq.
"	Rev. R. S. Sandeman	...	"	Rev. R. J. Sandeman.
"	Rev. R. Black, £1 1s.	...	"	£1.
"	John Wilson, Esq., £1 1s.	...	"	£1.

## PUBLICATIONS OF THE SOCIETY.

- Nos. 1 to 6.—The earlier papers, which have mostly been embodied in subsequent publications, are now out of print.
7. Captain Warren's Notes on the Valley of the Jordan and Excavations at Ain es Sultan (Jericho).
8. Dean Stanley's Sermon on the Exploration of Palestine. Price 6d.
- 9—15. Quarterly Statement. Vol. I. Nos. I. to VII.
- These Nos. are now all out of print, except 5, 6, and 7, which contain, among other matter—The History of the Moabite Stone—Captain Warren on Lebanon and the Temples of Cœle-Syria—Captain Warren's Journey to East of Jordan—Letters from Mr. E. H. Palmer—Mr. Simpson on the Royal Quarries—Plan of the Haram Area, showing Excavations—&c., &c.
16. Quarterly Statement. New Series. No. I.
- Contents: Preface—The Desert of the Tih and the Country of Moab, by Mr. E. H. Palmer, with large map and illustrations.
17. Quarterly Statement. New Series. No. II.
- Contents: Map of Moab—Captain Warren on the Plain of Philistia—Dr. Hyde Clarke on the Præ-Israelite Inhabitants of Palestine—Mr. Palmer on the Lebanon—M. Clermont-Ganneau on certain New Discoveries—&c., &c.
18. Quarterly Statement. New Series. No. III.
- The Building of the Mosque of Omar, by E. H. Palmer, Esq.—The Annual Meeting—M. Clermont-Ganneau's New Discoveries in Jerusalem—&c., &c.
19. Quarterly Statement. New Series. No. IV.
- History of the Mosque of Omar, by E. H. Palmer, Esq.—Captain Warren's Latitudes and Longitudes—Mr. Hyde Clarke on the Pre-Israelite Inhabitants of Palestine—&c., &c.
- The Quarterly Statements for 1871 (New Series, Nos. I.—IV.) may be had free by any subscriber for that year of at least half-a-guinea.
20. Quarterly Statement. Jan., 1872.
- Containing Letters and Communications from Mr. Grove, Captain Burton, Rev. F. W. Holland, Mr. C. F. Tyrwhitt Drake, Mr. Samuel Sharpe, Mr. Dugald Campbell, Dr. Alexander Buchan, and Capt. Stewart, R. E.
21. Quarterly Statement. April, 1872.
- Reports from Captain Stewart and Mr. Tyrwhitt Drake.—Papers from Captain Wilson, Rev. H. E. Northey, Mr. J. E. Bailey, Mr. Hyde Clarke, &c., &c., &c.

## LOCAL ASSOCIATIONS.

- ALLOA : *Hon. Sec.*—Rev. Alexander Bryson.
- ABERDEEN : *Hon. Sec.*—Rev. Prof. Milligan, D.D.
- ALNWICK : *Hon. Sec.*—Edward Allen, Esq.
- ARBROATH : *Hon. Sec.*—Mr. Anderson.
- ASHFORD : *Hon. Sec.*—F. A. Dewé, Esq.
- AYR : *Hon. Sec.*—Robert Murdoch, Esq.

# LOCAL ASSOCIATIONS.

- BASINGSTOKE: *Hon. Sec.*—Rev. W. Marriner.  
 BATH: *Hon. Sec.*—Rev. T. P. Methuen.  
 BEDFORD: *Hon. Sec.*—E. W. Ransom, Esq.  
 BIRKENHEAD: *Hon. Sec.*—Rev. A. D. Matthews, St. Aidan's College.  
 BIRMINGHAM: *Hon. Sec.*—Rev. Charles Evans.  
 BLACKBURN: *Hon. Secs.*—Rev. Canon Birch and Rev. A. B. Grosart.  
 BRADFORD: *Hon. Sec.*—Rev. W. Dyson.  
 BRIGHTON: *Hon. Sec.*—Rev. C. E. Douglass.  
 BROADSTAIRS: *Hon. Sec.*—Rev. J. H. Carr.  
 BURNLEY: *Hon. Sec.*—Rev. H. Stamer.  
 BURY ST. EDMUNDS: *Hon. Sec.*—H. Prigg, Esq., Jun.  
 BURY: *Hon. Treas.*—Rev. J. Hornby; *Hon. Sec.*—Rev. W. Thorburn.  
 CALLINGTON: *Hon. Sec.*—Rev. F. V. Thornton.  
 CAMBRIDGE: *Hon. Sec.*—Rev. T. G. Bonney, Tutor of St. John's College.  
 CANADA: Toronto.—Subscriptions are kindly received by the Hon. G. W. Allan.  
 CARDIFF: *Hon. Sec.*—J. C. Oliver, Esq.  
 CHELMSFORD: *Hon. Sec.*—H. S. Coleman, Esq.  
 CHELTENHAM: *Hon. Sec.*—Dr. E. Wilson.  
 CHESTER: *Hon. Sec.*—The Very Rev. the Dean of Chester.  
 CHIGWELL: *Hon. Sec.*—Rev. H. M. Robinson.  
 CHIPPENHAM: *Hon. Sec.*—A. T. Keary, Esq.  
 CLIFTON and BRISTOL: *Hon. Sec.*—Rev. C. H. Wallace.  
 COUPAR ANGUS: *President*—Very Rev. Dean Torry.  
 CROYDON: *Hon. Sec.*—Mr. Warren.  
 DALKEITH: *Hon. Sec.*—W. Bryce, Esq., M.D.  
 DEVIZES: *Hon. Sec.*—Rev. W. P. S. Bingham.  
 DEVONPORT: *Hon. Sec.*—J. Venning, Esq.  
 DORCHESTER: *Hon. Sec.*—Rev. Handley Moule.  
 DOVER: *Hon. Sec.*—Mr. W. P. Mummery.  
 DUNDEE: *Hon. Sec.*—R. Mackenzie, Esq.  
 DURHAM: *Hon. Sec.*—Rev. J. Dodd.  
 DUNFERMLINE: *Hon. Sec.*—Rev. And. Brydie.  
 EASTBOURNE: *Hon. Sec.*—Rev. H. R. Whelpton.  
 EDINBURGH: *Hon. Sec.*—Rev. W. Lindsay Alexander, D.D.  
 EXETER: *Hon. Sec.*—Rev. Prebendary Acland, Broad Clyst.  
 FALMOUTH, for the County of Cornwall: *Hon. Secs.*—A. Lloyd Fox and W. P. Dymond, Esq.  
 FAVERSHAM: *Hon. Sec.*—Charles Smith, Esq.  
 FORFAR: *Hon. Sec.*—T. Wilkie, Esq.  
 FROME: *Hon. Sec.*—Rev. T. G. Rooke.  
 FOLKESTONE: *Hon. Sec.*—Rev. J. W. Watson.  
 GLASGOW: *Hon. Secs.*—Rev. W. Dickson, D.D., and A. B. M'Grigor, Esq.  
 GLOUCESTER: *Hon. Secs.*—Rev. J. Bowman and F. Cooke, Esq.  
 GREENOCK: *Hon. Sec.*—D. MacDonald, Esq.  
 GUILDFORD: *Hon. Sec.*—Capt. Campbell, R.N.  
 HALIFAX: *Hon. Sec.*—  
 HALSTEAD: *Hon. Secs.*—Rev. S. J. Eales and Rev. J. W. Coombes.  
 HASTINGS: *Hon. Sec.*—T. Dearing, Esq.  
 HELENSBURG: *Hon. Sec.*—Rev. A. Murray McCallum.



# LOCAL ASSOCIATIONS.

- HERTFORD : *Hon. Sec.*—W. M. Armstrong, Esq.  
 HEXHAM : *Hon. Sec.*—John Hope, Esq., jun.  
 HUDDERSFIELD : *Hon. Sec.*—Henry Barker, Esq., Railway St., St. George's Sq.  
 HULL : *Hon. Sec.*—Dr. Bell.  
 HUNTINGDON : *Hon. Sec.*—Rev. Gerald Vesey.  
 INVERNESS : *Hon. Sec.*—Capt. Bolland, R.F.  
 IPSWICH : *Hon. Sec.*—Rev. J. R. Turnock.  
 KETTERING : *Hon. Sec.*  
 KIRKALDY : *Hon. Sec.*—John Barnett, Esq.  
 LEEDS : *Hon. Sec.*—Edward Atkinson, Esq.  
 LEITH : *Hon. Sec.*—A. Davies, Esq.  
 LEWES : *Hon. Sec.*—Rev. R. Straffen.  
 LISKEARD : *Hon. Treas.*—John Eliot, Esq. ; *Hon. Sec.*—Rev. Dr. Ritchie.  
 MALVERN : *Hon. Sec.*—Rev. D. F. A. Grahame.  
 MANCHESTER : *Hon. Sec.*—Rev. W. Crane.  
 MANSFIELD : *Hon. Sec.*—T. W. Clarke, Esq.  
 MARCH : *Hon. Sec.*—Rev. J. Cater.  
 MARGATE : *Hon. Sec.*—Rev. G. Collis.  
 MIDDLESBOROUGH : *Hon. Sec.*—Rev. V. H. Moyle.  
 MONTROSE : *Hon. Sec.*—Mr. Mackie.  
 NEWARK : *Hon. Sec.*—Evelyn Falkner, Esq.  
 NEWARK : Ladies' Committee. *Hon. Treas.*—Mrs. Tallents ; *Hon. Sec.*—Mrs. G. Hodgkinson.  
 NEWBURY : *Hon. Sec. pro tem.*—Rev. J. L. Randal.  
 NEWCASTLE : *Hon. Treasurer.*—Thomas Hodgkin, Esq. ; *Hon. Sec.*—W. Lyall, Esq.  
 NEWPORT PAGNELL : *Hon. Sec.*—F. Tayler, Esq.  
 OLNEY : *Hon. Sec.*—W. Hipwell, Esq.  
 OXFORD : *Hon. Secs.*—Rev. Professor Rawlinson and Rev. Edwin Hatch.  
 PAISLEY : *Hon. Sec.*—Rev. J. Dods.  
 PERTH : *Hon. Sec.*—John W. Jameson, Esq.  
 PLYMOUTH : *Hon. Secs.*—J. B. Rowe, Esq., and J. Shelley, Esq.  
 PORTSMOUTH : *Hon. Sec.*—Rev. N. R. Devereux.  
 REIGATE and REDHILL : *Hon. Sec.*—W. Wilson Saunders, Esq.  
 RICHMOND : *Hon. Sec.*—R. R. Alexander, Esq.  
 SCARBOROUGH : *Hon. Sec.*—Rev. A. S. Aglen.  
 SEVENOAKS : *Hon. Sec.*—Graham Jackson, Esq.  
 SOUTHPORT : *Hon. Sec.*—George Lee, Esq.  
 SHERBORNE : *Hon. Sec.*—J. Farmer, Esq.  
 SOWERBY : *Hon. Sec.*—Rev. A. L. W. Bean.  
 ST. ALBANS : *Hon. Sec.*—Rev. W. J. Lawrance.  
 ST. ANDREW'S : *Hon. Secs.*—Dr. Lees and Dr. Mitchell.  
 ST. GERMANS : *Hon. Sec.*—R. Kerswill, Esq.  
 ST. LEONARDS :—Mrs. Alexander, Brunswick House, Marina, has kindly consented to receive subscriptions.  
 STIRLING : *Hon. Sec.*—Rev. W. Taylor.  
 STREATHAM : *Hon. Sec.*—Rev. W. Raven.  
 STROUD : *Hon. Sec.*—T. S. Osborne, Esq.  
 TAUNTON : *Hon. Sec.*—R. J. Shepherd, Esq.  
 TAVISTOCK : *Hon. Sec.*—Mr. Frederick Clarke.

PHOTOGRAPHS.—MOABITE STONE.—THE HAMAH INSCRIPTIONS.

- TIVERTON: *Hon. Sec.*—J. Allen, Esq.  
TUNBRIDGE WELLS: *Hon. Sec.*—Capt. Palmer, R.E.  
UXBRIDGE: *Hon. Sec.*—J. Hunt, Esq., F.R.G.S.  
WARMINSTER: *Hon. Sec.*—W. Frank Morgan, Esq.  
WELLS: *Hon. Sec.*—W. I. Welsh, Esq.  
WESTON-SUPER-MARE: *Hon. Secs.*—Capt. T. Townsend, R.E., and J. Titley, Esq.  
WHITBY: *Hon. Sec.*—E. W. Chapman, Esq.  
WILLESDEN: *Hon. Sec.*—Rev. J. Crane Wharton.  
WINCHESTER: *Hon. Sec.*—Miss Zornlin.  
WINDSOR: *Hon. Sec.*—Rev. H. Courtenay Hawtrey.  
WORCESTER: *Hon. Sec.*—Rev. Francis J. Eld.  
YARMOUTH: *Hon. Sec.*—Rev. H. R. Nevill.

---

PHOTOGRAPHS.

The photographs issued by the Fund can be purchased of Mr. Edward Stanford, 6 and 7, Charing Cross, at the following rates:—

To Non-Subscribers ... .. 1s. 6d. each.

To Annual Subscribers of half-a-guinea ... 1s. 0d. each.

Catalogues and Lists can be obtained at the Agents' or the Society's Offices.

Agents are also established in the different towns, and the Secretary will be glad to hear from any person desirous of undertaking the agency.

---

THE "SEAL OF HAGGAI."

Casts of this small seal, which is of very great antiquity, have been taken. They can be procured at 2s. 6d. each.

---

THE MOABITE STONE.

Facsimile casts of the small fragments have been taken. They can be procured at cost price.

Photographs (to be obtained of Mr. Edward Stanford)—

1. One-third size of Captain Warren's tracings (mounted)... £0 3 6
2. Full size of the squeezes themselves, in four photographs... 2 10 0

---

THE HAMAH INSCRIPTIONS.

Photographs of the squeezes have been taken, and can now be procured.



# LIST OF SUBSCRIPTIONS.

MARCH 19TH TO JUNE 24TH, 1872.

*a* denotes Annual Subscriber.

\*. \* If any omission or mistake be observed in the following lists, the Secretary will be very glad to be informed of it, and will rectify the error in the next *Quarterly Statement*.

	£	s.	d.		£	s.	d.
Bishop of Dover .....	1	1	0	<i>a</i> W. Wigglesworth, Esq. ....	0	10	6
G. S. Gibson, Esq. ....	10	0	0	<i>a</i> Rowland Winn, Esq., M.P. ...	1	1	0
Mrs. Johnson .....	0	5	0	<i>a</i> Bishop of Fredericton .....	1	1	0
Mrs. Hay .....	1	0	0	Rev. G. W. Hebden (5s. <i>a</i> ) ...	0	10	0
<i>a</i> Mrs. Gerrard Forsyth .....	0	10	0	F. Puckridge, Esq. ....	2	2	0
<i>a</i> G. B. Crewdson, Esq. ....	1	1	0	<i>a</i> General Gascoyne .....	1	1	0
<i>a</i> Rev. Edward Prout .....	0	10	6	Ditto for 1871 ...	1	1	0
<i>a</i> Mrs. Cunliffe .....	10	0	0	Hastings Middleton, Esq. (in-			
<i>a</i> W. Walthew, Esq. ....	1	1	0	cluding £1 1s. <i>a</i> ) .....	10	0	0
<i>a</i> Brinsley Nicholson, Esq. ....	1	1	0	<i>a</i> Rev. Charles Perry .....	0	10	0
<i>a</i> A. F. Nicholson, Esq. ....	1	1	0	<i>a</i> M. H. Rankin, Esq. ....	1	1	0
<i>a</i> Mrs. Norris .....	2	2	0	<i>a</i> J. N. Foster, Esq. ....	1	1	0
<i>a</i> Miss Clayton .....	0	10	0	B. E. Wilkinson, Esq. ....	10	0	0
Miss Dart .....	0	10	0	H. Smith, Esq. (including			
Rev. G. F. Weston (£1 1s. <i>a</i> )...	1	10	0	£1 1s. <i>a</i> ) .....	1	6	0
<i>a</i> Rev. W. Bruce .....	0	10	6	<i>a</i> Mrs. Cheetham .....	1	1	0
<i>a</i> P. S. ....	1	1	0	Miss Agnes Cheetham .....	1	1	0
Rev. Edward Maxwell .....	2	0	0	<i>a</i> Rev. E. Field .....	1	1	0
Rev. H. Bolland .....	2	2	0	<i>a</i> Miss Anne Stock .....	1	1	0
<i>a</i> Miss D. Cater .....	1	1	0	<i>a</i> J. A. Howden, Esq. ....	1	1	0
<i>a</i> J. W. Bright, Esq., M.D. ....	1	1	0	A. Micklejon, Esq., for 1872			
<i>a</i> Miss Greathed .....	2	2	0	and 1873 .....	1	0	0
<i>a</i> Mrs. Bastow .....	1	1	0	C. J. Leaf, Esq. ....	25	0	0
Ditto ( <i>a</i> ) for four years .....	1	1	0	<i>a</i> Miss Hislop .....	0	5	0
<i>a</i> Rev. W. A. Bathurst .....	2	0	0	<i>a</i> Charles Clark, Esq. ....	1	1	0
Bishop of Lincoln .....	5	0	0	M. Bulteel, Esq. ....	0	10	0
<i>a</i> Rev. W. Inge .....	1	1	0	<i>a</i> Rev. Cator Chamberlain .....	2	2	0
Collected by Miss Murphy ...	1	17	0	<i>a</i> Mrs. Wolff, Taunton .....	1	0	0
<i>a</i> J. Simson, Esq. ....	1	1	0	<i>a</i> W. Butler, Esq. ....	0	5	0
R. Mullings, Esq. ....	5	0	0	Miss L. C. Relton (5s. <i>a</i> ) ....	0	8	0
<i>a</i> T. Spear Parker, Esq. ....	2	2	0	<i>a</i> Rev. James Gamble .....	0	10	6
Collected by Miss F. H. Parker	1	0	0	<i>a</i> H. MacLauchlin, Esq. ....	0	10	6
<i>a</i> Miss Lockwood .....	0	10	6	<i>a</i> Rev. James Bagge .....	1	1	0
<i>a</i> Rev. T. O. Beeman .....	0	10	6	<i>a</i> Edward Lewis, Esq. ....	1	1	0
<i>a</i> Rev. Robert Black (Hamilton)	1	0	0	<i>a</i> Mrs. Prior .....	1	0	0
<i>a</i> T. L. Jardine, Esq. ....	1	1	0	<i>a</i> Edward Pears, Esq. ....	0	10	6
<i>a</i> Rev. R. P. Wilkinson .....	1	1	0	<i>a</i> John Spencer, Esq. ....	0	10	0
<i>a</i> Rev. Dr. Barclay .....	1	13	0	Miss Mulholland... £1 19 0			
Hon. Otway Toler .....	2	0	0	S. Mulholland, Esq. 1 1 0			
<i>a</i> Rev. M. T. Farrer .....	1	1	0	<i>a</i> Rev. W. F. Clarkson .....	0	5	0
<i>a</i> Rev. R. H. Codrington .....	1	1	0	<i>a</i> Rev. G. W. Straton .....	1	0	0
<i>a</i> Rev. F. G. Burnaby .....	2	0	0	<i>a</i> W. Lawrence, Esq. ....	1	0	0

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
Edward Pears, Esq. ....	0	5	0	Lord Northbrook .....	5	0	0
aMiss Garnett .....	0	10	0	aJ. Fennell, Esq. ....	1	1	0
aS. Scott, Esq. ....	1	1	0	aMiss Martin .....	1	1	0
H. M. W. (to complete sub- scription of Jan. 17) .....	0	3	0	aC. Netter, Esq. ....	0	10	6
Delta .....	5	0	0	Rev. J. Thorpe .....	0	5	0
aA. W. Harris, Esq. ....	0	10	6	E. C. Wade, Esq. ....	1	0	0
aH. Anderson, Esq. ....	0	5	0	John Cock, jun., Esq. ....	0	5	0
aRev. A. A. Isaacs .....	0	10	6	aMrs. C. H. Brooke .....	0	10	0
aW. Windley, Esq. ....	2	2	0	Mrs. Newman Smith .....	5	0	0
aMrs. Birkbeck .....	1	1	0	Collected by Miss Killick .....	1	11	6
aRev. John Winter .....	0	10	6	aRev. Greville J. Chester .....	0	10	6
aLord Alfred Churchill .....	5	0	0	aT. Cook, Esq. ....	1	1	0
				aJ. A. Fraser, Esq. ....	1	1	0

## LOCAL ASSOCIATIONS.

ARBROATH.	£	s.	d.	BASINGSTOKE.	£	s.	d.
March 25.—By cash .....	7	11	5	June 20.—By cash .....	3	7	0
Alex. Gordon, Esq. £1 1 0				Wallace Walker, Esq., Wolverton Park, Newbury .....	£2	2	0
Andrew Lowson, Esq. 1 1 0				Rev. R. Pole, Wolver- ton Rectory, New- bury .....	1	0	0
Messrs. Wm. Salmond and Sons .....	1	1	0	Rev. W. L. Blackley, North Waltham Rectory, Michel- dever Station .....	0	5	0
James Shanks, Esq. 0 10 6				Rev. W. Marriner, Banghurst Rectory, Basingstoke .....	0	5	0
James Muir, Esq. ... 0 10 0					3	12	0
Messrs. A. Nicol & Co. 0 10 0				Less expenses.....	0	5	0
William Rollo, Esq. 0 7 6					3	7	0
Rev. Alexander Sorley 0 5 0							
Rev. John Chalmers 0 5 0							
Rev. Frank Mudie ... 0 5 0							
James M. M. Bain, Esq. 0 5 0							
William Salmond, Esq. 0 5 0							
William Briggs, Esq. 0 5 0							
Alex. Ferguson, Esq. 0 5 0							
Alex. Ferguson, Esq. 0 5 0							
11 sums of 2s. 6d. ... 1 7 6							
£ 3 5							
Deduct expense of dis- tributing circulars and collecting sub- scriptions £0 8 0							
Carriage of Photographs 0 4 1							
0 12 1							
7 11 5							



# LIST OF SUBSCRIPTIONS.

BATH.

May 7.—By Cash ..... £6 19 6

The following Statements of Accounts are forwarded by the Hon. Sec.

<i>Receipts.</i>			<i>Expenditure.</i>		
1871.			1871.		
Miss Dyke .....	£0	5 0	Hire of rooms .....	£1	11 6
Rev. W. H. Sargent .....	1	1 0	By cheque.....	24	13 0
R. T. Gore, Esq. ....	0	10 0	Advertisements .....	0	6 6
Rev. R. Drummond .....	0	5 0	Bills for 1870 .....	3	4 0
Capt. Anderdon .....	1	1 0	Stamps .....	0	3 1
Mrs. Mount .....	1	0 0	Bills for 1871 .....	2	4 6
Miss Batchellous .....	1	1 0	Advertisements .....	0	4 6
Rev. S. Wood .....	0	10 0	Ditto .....	0	5 6
Mayor of Bath .....	1	0 0	Ditto .....	0	5 6
Rev. C. Kemble .....	0	10 0			
Collection .....	14	19 7½			32 18 1
Miss Goldies.....	1	0 0			
Miss Orde.....	0	10 6			
W. J. Church, Esq. ....	1	1 0			
R. Stothert, Esq. ....	0	10 0			
Rev. T. P. Methuen .....	1	1 0			
Rev. J. F. Moor .....	0	10 0			
Rev. J. Lawes .....	0	10 0			
Mrs. Parr .....	0	10 0			
Mrs. Churten .....	1	1 0			
Rev. W. S. Shaw.....	0	10 0			
Rev. F. T. Bassett ...	0	5 0			
Rev. H. H. Cornwood .....	1	1 0			
Rev. G. E. Tate .....	1	0 0			
J. Johnstone, Esq. ...	0	10 0			
Rev. G. E. Tate .....	1	0 0			
Miss S. Smith .....	0	5 0			
C. Timins, Esq. ....	0	5 0			
Rev. F. S. Escott ...	0	5 0			
Captain Anderdon ...	1	1 0			
Mrs. Elder .....	0	5 0			
			Balance.....	2	5 0½
					35 3 1½
		35 3 1½			
<i>Receipts.</i>			<i>Expenditure.</i>		
1872.			1872.		
Miss Dyke .....	£	0 5 0	Advertisements .....	£	0 5 6
Miss Goldies .....	1	0 0	Due from 1871 .....	2	5 0½
Rev. J. Bond.....	0	10 0			
R. T. Gore, Esq. ....	0	10 0			
Rev. W. H. Sargent.....	1	1 0			
Rev. J. F. Moor.....	0	10 0			
Mrs. Moor .....	0	10 0			
Mrs. Mount .....	1	1 0			
Rev. R. Drummond .....	0	10 0			
Captain Anderdon..	2	2 0			
Rev. T. P. Methuen.....	1	1 0			
W. Daubeney, Esq. ....	0	10 0	Balance .....	6	19 5½
					9 10 0
		9 10 0			

# LIST OF SUBSCRIPTIONS.

## BIRKENHEAD.

The Rev. A. D. Mathews has been succeeded in his office as hon. secretary by the Rev. J. T. Kingsmill and Henry Bell, Esq. Mr. Mathews, however, remains upon the Committee.

The following circular has been issued by the Local Committee:—

### PALESTINE EXPLORATION FUND.

#### BIRKENHEAD LOCAL ASSOCIATION.

1872.

#### Chairman.

JOHN LAIRD, ESQ., M.P.

#### Treasurer.

THE REV. W. SAUMAREZ SMITH, Principal of St. Aidan's College.

#### Committee.

SAMUEL STITT, ESQ.

EUGENE PERRIN, ESQ.

REV. J. T. PEARSE.

REV. A. MACLEOD.

REV. A. D. MATHEWS.

#### Hon. Secretaries.

REV. J. T. KINGSMILL, St. Aidan's College.

HENRY BELL, ESQ., JUN., Grosvenor Road, Birkenhead.

(The Rev. A. D. Mathews, Local Hon. Sec. pro tem., has resigned in favour of Mr. Kingsmill.)

The following donations and subscriptions have been given or promised after a series of lectures recently delivered in Liverpool and Birkenhead, in aid of this important undertaking:—

#### Donations—

	£	s.	d.		£	s.	d.
J. Laird, Esq. (in four years)	20	0	0	J. J. Nixon, Esq. ....	0	10	6
The Mayor of Liverpool .....	5	0	0	J. Stower, Esq. ....	0	10	6
C. Bushell, Esq. ....	5	0	0	Rev. M. Fearnley .....	0	10	0
Samuel Stitt, Esq. ....	5	0	0	G. R. Livingstone, Esq. ....	9	10	0
Mrs. Brancker .....	2	0	0	A. T. Squarey, Esq. ....	0	10	0
Rev. J. Carter .....	1	0	0	Miss Thompson .....	0	10	0
P. A. Williams, Esq. ....	0	10	0	Rev. H. Williams .....	0	10	0

#### Subscriptions—

Rev. W. Saumarez Smith.....	1	10	0	W. Williamson, Esq. ....	0	10	0
Samuel Stitt, Esq. ....	1	1	0	P. A. Williams, Esq. ....	0	5	0
Eugene Perrin, Esq. ....	1	1	0	The amount collected at the			
Rev. J. T. Pearse .....	1	1	0	meetings held, was—			
Henry Bell, Esq. ....	1	1	0	Birkenhead Music Hall .....	8	12	10
Henry Bell, jun., Esq. ....	1	1	0	Liverpool College Hall.....	7	1	0
Henry Cox, Esq. ....	1	1	0	Bebington .....	3	0	0
R. Duke, Esq. ....	1	1	0	Rock Ferry.....	3	15	5
Rev. W. Griffiths .....	1	1	0	Oaklands, Claughton .....	3	18	6
C. J. Preston, Esq. ....	1	1	0	St. Aidan's Chapel .....	5	0	0
H. Mocatta, Esq. ....	0	10	6	Bromborough.....	1	1	0

Total amount accounted for to the central office (up to March 31), £85 13s. 6d.

The Fund is now chiefly engaged in a complete and accurate survey of the western part of the Holy Land; while the American Society is similarly occupied on the east of Jordan. One of the most important results will be the construction of the first accurate map of the whole country, on a sufficient scale to show every object of interest. The excavations in Jerusalem and antiquarian researches throughout the country, will also be continued.

An accurate knowledge of the country which was the scene of most of the events of Biblical History, cannot but tend greatly to illustrate and confirm the sacred narrative; and every one must wish for the fullest possible information about the land hallowed by the footsteps of Jesus.

# LIST OF SUBSCRIPTIONS.

Lord Derby has written to the local honorary secretary :—"I quite agree with the promoters in thinking that this work, if systematically prosecuted, may lead to results of much historical interest."

The Committee, therefore, confidently commend the work to you, and respectfully solicit your assistance in carrying it on. The estimated cost is £3,500 annually for about four years; and £7,000 is provided. About £7,000 more is therefore needed.

N.B. Cheques payable to the Treasurer, the Rev. W. Saumarez Smith, at the North and South Wales Bank, Birkenhead (Palestine Exploration Fund Account). Subscribers of Half-a-Guinea annually are entitled to the publications of the Society.

It is hoped that a Liverpool Local Association will be formed; but in the meantime the Birkenhead Association will be glad to receive contributions from Liverpool.

Since the above was issued the following names have been received by the Hon. Sec. :—

W. Inman, Esq. ....	£5	0	0
aJohn Torr, Esq. ....	1	1	0
aRev. E. Price .....	0	10	6

## BIRMINGHAM.

Rev. J. Thornton .....	£1	1	0
------------------------	----	---	---

## BRIGHTON.

April 24.—A. W. Harrison, Esq. (a) .....	£1	1	0
May 25.—Miss Buxton (third donation) .....	5	5	0
May 24.—By cash .....	9	15	0

Statement of Accounts forwarded by Hon. Sec. :—

## Lecture, Dec., 1871.

<i>Receipts.</i>	£	s.	d.	<i>Expenditure.</i>	£	s.	d.
Tickets sold by G. W. Wakeling	6	0	0	Advertising—			
" " Messrs. Treacher	2	13	0	Brighton "Guardian" .....	0	10	6
" " Noyes & Friend	0	17	0	" "Times" .....	0	5	0
Money taken at the doors .....	15	9	6	" "Herald" .....	1	14	6
				Advertising and Publishing,			
				Brighton "Gazette" .....	5	2	0
				Four Assistants at 3s. 6d. each	0	14	0
				Hire of Dome .....	6	17	0
				Organ and Organist .....	2	2	0
				Fees, &c. ....	0	7	0
				Charman, Bill Sticker .....	1	13	0
				Balance not yet sent in by Mr.			
				G. Wakeling, Royal Library,			
				North Street, Brighton .....	5	14	6
	25	4	6		25	4	6

## Exploration Fund, April, 1872.

<i>Receipts.</i>	£	s.	d.	<i>Expenditure.</i>	£	s.	d.
Miss M. Ridding .....	5	0	0	Expenses of Collection .....	0	4	6
Miss Cobham .....	1	1	0	Cash remitted on May 23, 1872,			
Mrs. Cochrane .....	0	10	6	by the Local Hon. Sec., Rev.			
Archibald Young, Esq. ....	0	5	0	C. E. Douglass, 14, Clifton			
G. W. King, Esq. ....	1	1	0	Terrace, Brighton .....	9	15	0
Rev. Dr. Hannah .....	1	1	0				
Rev. C. E. Douglass .....	1	1	0				
	9	19	6		9	19	6

# LIST OF SUBSCRIPTIONS.

## DOVER.

The Report of the Meeting of March 4th, under the presidency of H.R.H. Prince Arthur, was reprinted from the report published by the local papers. Several errors have crept in, especially in the speech of Captain Wilson. It is not thought necessary to correct these, unavoidable in the reporting of strange names, but, if they have been remarked, this explanation will be sufficient to account for them.

## EDINBURGH.

The Edinburgh Committee have appointed A. B. Johnston, Esq., F.R.G.S., as their Honorary Secretary, in the place of the late Dr. Alexander Keith Johnston.

## EXETER.

	£	s.	d.
1872.			
May 16.—By cash .....	15	11	0
1872.			
*Rev. P. L. D. Acland	£1	1	0
Mrs. Arden .....	1	1	0
†Miss C. E. B. ....	0	5	0
Canon Cook .....	1	1	0
Right Rev. the Lord Bishop of Exeter...	5	0	0
†Rev. W. Heberden ...	1	0	0
†Sir J. Kennaway, Bt.	2	0	0
†Rev. C. L. Kennaway (double sub.) .....	0	10	0
*Mrs. Arthur Mills ...	1	1	0
Mrs. Colonel Stafford	1	1	0
†Rev. J. B. Strother...	1	1	0
*Miss White .....	0	10	0
	15	11	0
* Promised for three years, now completed.			
† Ditto ditto			

## FALKIRK.

April 3.—A. Crum Ewing, Esq. 1 0 0

## FORFAR.

The following subscriptions are announced by the Hon. Secretary for Forfar:—

Alexander Robertson, Esq., Sheriff Substitute, Benholm Lodge, Forfar .....	0	10	6
Rev. George Moir, Lethan .....	0	5	0
Rev. Robert Stevenson, Forfar	0	5	0
Mr. Peter Reid, Forfar .....	0	5	0
Rev. D. L. McCorkindale, Forfar .....	0	2	6
David Steel, Esq., Forfar .....	0	3	6

## FROME.

May 14, per Rev. T. G. Rooke.  
Statement of Account.  
Annual Subscriptions for 1872,  
per Local Secretary, the Rev. T.  
G. Rooke:—

Mr. Jos. Chapman	£0	2	6
Mr. E. Flatman ...	0	10	0
Mr. T. Green .....	1	1	0
Mr. T. H. Holroyd	1	1	0
Rev. T. G. Rooke...	1	1	0
Mr. Joseph Tanner	0	10	0
Mr. J. Tanner, jun.	1	1	0
Collected by Mr. E. C. Olive:—			
Rev. W. Crouch ...	0	5	0
Rev. A. Daniel.....	0	10	6
Mr. G. Daniel .....	0	5	0
Mr. H. Cockey.....	0	5	0
Rev. J. Horton.....	0	5	0
Mr. E. C. Olive ...	0	10	6
Mr. C. L. Robertson	0	10	6
Mr. T. W. B. Shep- pard .....	0	5	0
Mr. T. W. D. Wick- ham .....	0	10	6
Collected by Miss Thompson:—			
Mr. Houston .....	0	10	6
Mr. Le Gros .....	0	10	6
Miss Sewell .....	0	10	6
Mrs. J. Sheppard...	0	10	6
Mr. Thompson and family .....	0	18	0

£ s. d.

11 13 6

11 13 6

# LIST OF SUBSCRIPTIONS.

## GLASGOW.

The following is the list of gentlemen comprising the Committee of the Local Association of Glasgow :—

The Hon. the Lord Provost.	Joshua Paterson, Esq., M.D.
The Very Rev. Principal Barclay.	F. H. Thompson, Esq., M.D.
The Rev. Principal Fairbairn.	George Burns, Esq.
Rev. Robert Buchanan, D.D.	James Campbell, Esq., of Tillichewan.
Rev. John Caird, D.D.	James A. Campbell, Esq.
Rev. George Douglas, D.D.	Wm. Church, jun., Esq.
Rev. John Eadie, D.D., LL.D.	Peter Coats, Esq., Paisley.
Rev. Robert Jamieson, D.D.	Michael Connal, Esq.
Rev. James Henderson, D.D.	Alex. Crum, Esq.
Rev. J. R. Macduff, D.D.	Arch. Orr Ewing, Esq., of Ballikiurain.
Rev. J. W. Penney, D.C.L.	John Orr Ewing, Esq.
Rev. Alex. Wallace, D.D.	James Wyllie Guild, Esq.
Rev. D. H. Weir, D.D.	William Keddie, Esq.
Rev. Andrew A. Bonar.	William Ker, Esq.
Rev. A. H. Charteris.	George Martin, Esq.
Rev. J. W. Borland.	James Mitchell, Esq.
Rev. J. M. Maynard.	Peter Murdoch, Esq.
Rev. J. Monteith.	Daniel Macnee, Esq.
Rev. R. S. Oldham, M.A.	W. Mackinnon, Esq.
Rev. W. H. Smith.	Robert Napier, Esq., of Shandon.
Rev. A. N. Somerville.	S. M. Penney, Esq.
W. G. Blackie, Esq., Ph.D., M.R.G.S.	W. J. Peebles, Esq.
James Bryce, Esq., M.A., LL.D.	John Ramsay, Esq., of Kildalton.
J. G. Fleming, Esq., M.D.	Archibald Robertson, Esq.
W. T. Gairdner, Esq., M.D.	Charles Heath Wilson, Esq.

George Readman, Esq., Clydesdale Bank, *Treasurer.*

W. P. Dickson, D.D., }  
 Alex. B. M'Grigor, } *Secretaries.*

## SUB-COMMITTEE.

The Lord Provost.	James A. Campbell, Esq.
Rev. Dr. M'Duff.	James Bryce, Esq., M.A., LL.D.
Rev. Dr. Buchanan.	Charles Heath Wilson, Esq.
Rev. Mr. Oldham.	

George Readman, Esq., *Treasurer.* }  
 W. P. Dickson, D.D., } *Secretaries.* } *ex officio.*  
 Alex. B. M'Grigor, }

Donations and Subscriptions in aid of this object will be received by either of the Secretaries, or by the Treasurer, George Readman, Esq., Clydesdale Bank, Glasgow.

	£	s.	d.		£	s.	d.
Subscriptions collected by				Colin Donald, Esq., 136, St.			
Rev. G. St. Clair, March and				Vincent-street .....	1	1	0
April, 1872 :—				Thos. M. Fergusson, Esq., 89,			
Messrs. J. and W. Campbell				Mitchell-street .....	5	0	0
and Co., 29, Ingram-street.	5	0	0	Wm. Ker, Esq., 27, West			
Messrs. Mackenzie, Anken,				George-street .....	5	0	0
and Barclay, 66, St. Vin-				J. A. Wenley, Esq., Bank of			
cent-street .....	1	1	0	Scotland .....	1	0	0
Messrs. Steele and Co., 103,				W. Ewing, Esq., Royal Ex-			
St. Vincent-street .....	0	10	6	change .....	5	0	0
Bailie Macdonald, 20, St. Vin-				Messrs. W. Baird and Co.,			
cent-street .....	0	10	6	168, West George-street ...	5	0	0



# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
Messrs. Handyside and Henderson, 107, Union-street...	5	0	0	James Bell, Esq., High School	0	10	0
A. Paul, Esq., 14, George-sq.	1	0	0	D. Mackinlay, Esq., 6, Great Western-terrace.....	1	0	0
Messrs. Moncrieff, Paterson, Forbes, and Barr, 45, West George-street .....	3	3	0	G. Miller, Esq., 10, Windsor-terrace West .....	1	0	0
J. Salmon, Esq., 141, West George-street .....	1	0	0	C. E. Wilson, Esq., LL.D., 2, Kew-terrace .....	1	0	0
Wm. Auld, Esq., 65, St. Vincent-street .....	1	0	0	G. W. Clark, Esq., 61, Oswald-street .....	1	0	0
A. Kirkwood, Esq., 151, West George-street .....	4	0	0	J. N. Cuthbertson, Esq., 29, Bath-street .....	1	0	0
G. Thomson, Esq., 69, Ingram-street.....	0	10	6	Messrs. Turnbull and Co., 37, West George-street .....	1	0	0
W. G. Harvey, Esq., 33, Virginia-street.....	2	0	0	Messrs. J. Watson and Co., 103, St. Vincent-street....	1	1	0
James Caird, Esq., 27, Virginia-street..	1	0	0	M. Bullock, Esq., 11, Park-circus .....	1	1	0
M. Connal, Esq., Virginia-buildings .....	1	0	0	W. Walls, Esq., 64, North Frederick-street.....	2	0	0
Messrs. Okell, Selkirk, and Co., 175, Irongate.....	2	0	0	Messrs. M'Laren, Sons, & Co., 5, South Hanover-street ..	3	3	0
Messrs. G. Smith and Son, 200, Argyle-st. (afor 5 years)	2	0	0	Alex. Rodger, Esq., 17, Newton-place.....	1	0	0
R. Davidson, Esq., 106, Ingram-street.....	1	0	0	Dr. T. M'C. Anderson, 14, Woodside-crescent.....	2	2	0
J. Stewart, Esq., 114, Irongate	1	0	0	W. Hamilton, Esq. 17, Woodside-crescent .....	1	1	0
J. Naismith, Esq., 89, St. Vincent-street .....	1	0	0	J. J. Kerr, Esq., 13, Woodside-terrace.....	5	0	0
Prof. H. Rainy, M.D., 2, Woodside-place .....	1	0	0	W. Johnstone, Esq., C.E., 5, Woodside-terrace .....	2	2	6
P. Clouston, Esq., 1, Park-ter.	2	0	0	A. Frazer, Esq., 16, Prince's-square .....	1	1	0
Rev. H. Batchelor, Elgin-place Church, Pitt-street...	1	0	0	T. Frame, Esq., 110, Buchanan-street .....	1	0	0
A. Friend, 70, Gordon-street ..	2	0	0	D. Richardson, Esq., 89, Wilson-street .....	5	0	0
Alex. Crum, Esq., 4, West Regent-street .....	5	0	0	A. H. Maclean, Esq., 124, Queen-street .....	1	1	0
Alex. Mitchell, jun., Esq., 84, Ingram-street.....	1	0	0	J. Burnet, Esq., 150, St. Vincent-street .....	1	1	0
J. D. Bryce, Esq., 65, West Regent-street .....	2	0	0	D. S. Carghill, Esq., 191, West George-street .....	1	1	0
Messrs. Howat, Brown, and Co., 2, Springfield-court ...	1	0	0	M. S. Tait, Esq., 21, Woodlands-terrace .....	0	10	0
Sir James Lumsden, 20, Queen-street .....	2	0	0	R. Angus, Esq., 56, Hope-st. .	1	0	0
J. G. Fleming, Esq., M.D., 155, Bath-street .....	2	0	0	Messrs. Walker, Parker, & Co., 110, Cheapside-street .....	1	1	0
J. Watson, Esq. (Lord Provost), 12, St. Vincent-place .....	2	2	0	Mrs. J. Graham Gilbert, Yorkhill .....	2	2	0
Messrs. Wylie and Lockhead, 45, Buchanan-street .....	2	2	0	A Friend, 13, Kew-terrace ...	1	0	0
T. L. Paterson, Esq., 8, Gordon-street .....	1	1	0	J. Blackie, Esq., 20, Kew-ter.	1	0	0
Messrs. W. Govan and Son, 15, Renfield-street.....	1	0	0	J. Morton, Esq., 7, Carlton-place .....	2	2	0
J. H. M'Clure, Esq., 198, West George-street .....	1	0	0	J. Kirsop, Esq., 98, Argyle-st.	0	10	0
A. A. Fergusson, 11, Grosvenor-terrace .....	2	2	0	Messrs. G. Miller & Co., 130, Hope-street.....	1	1	0
	0	10	0	Messrs. James Miller & Co., 111, Union-street .....	1	1	0

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
A. Sloan, Esq., 106, St. Vincent-street	3	3	0	Mrs. Mudie	0	2	6
W. Church, Esq., 67, St. Vincent-street	0	10	0	M. Cochrane	0	2	6
Messrs. Stewart, Macdonald, & Co., 5, Buchanan-street	1	0	0	R. Stevenson	0	2	6
Wm. Sloan, Esq., 73, Gordon-street	2	2	0	G. Cross	0	2	6
H. K. Wood, Esq., 86, Miller-street	1	1	0	A. Cassels	0	5	0
G. Edward, Esq., 92, Buchanan-street	0	10	6	Duncan C. Barr	0	5	0
J. Freebairn, 29, Ingram-st.	0	5	0	Alex. Taylor	0	5	0
Rev. Dr. MacEwen, 25, Woodside-place	1	0	0	Wm. Tait	0	2	6
Mrs. Walter Gray, 11, Claremont-terrace	3	0	0	Gibson Dillon	0	4	0
Rev. D. Macleod, 1, Woodlands-terrace	3	3	0	P. B. Mitchell	0	2	6
Rev. Dr. Eadie, 6, Thornhill-terrace	1	0	0	James Keith, Esq.	0	5	0
R. Hutcheson, Esq., 2, Burnbank-gardens	2	2	0	T. A.	0	7	6
W. J. Davidson, Esq., 22, South Frederick-street	1	1	0	John Torrance	0	2	6
John Ross, jun., Esq., 106, Hope-street	2	0	0	J. S. Drummond, Esq.	0	5	0
GLOUCESTER.				Mrs. C. Bannatyne	0	5	0
May 7.				Miss Livingstone	0	2	6
αE. W. Gere, Esq.	0	10	6	Mrs. Hall	0	2	6
GREENOCK.				A Friend	0	2	6
αRev. J. J. Bonar	1	1	0	M. J. Henderson	0	2	6
αJohn Bonar, Esq., jun.	1	1	0	Mrs. Bowman	0	2	6
αJames Bonar, Esq.	1	1	0	Mrs. Watt	0	2	6
HAMILTON.				Mrs. Black	0	5	0
April 24.—By cash	15	6	5	Mrs. B. Oakley	0	2	6
W. Alston Dykes, Esq.	1	1	0	J. Dykes	0	5	0
P. W. Robertson, Esq.	0	10	6	Miss Mathew	0	2	6
J. Meek, Esq.	0	10	0	T. J. D. Wharrie	0	2	6
H. W. Hamilton, Esq.	1	1	0	James Granger	0	2	6
W. Naismith, Esq.	0	10	0	T. R. Anderson	0	2	6
P. C. Duncanson, Esq.	0	5	0	G. Sinclair	0	2	6
R. Kirkpatrick, Esq.	0	10	6	Mrs. Rose	0	2	6
Douglas Dykes, Esq.	0	10	6	W. Paterson	0	2	6
Alex. Gilmour, Esq.	0	10	0	Jas. Blacklock	0	5	0
J. Hamilton, Esq.	0	10	0	W. Gilmour	0	3	0
W. Fletcher, Esq.	0	5	0	Mrs. Henderson	0	2	6
A. Henderson, Esq.	0	10	0	Allan Robb	0	5	0
The Misses Urquhart	1	1	0	Robert Smith	0	3	0
R. C. Mackill, Esq.	0	5	0	James Peebles	0	2	6
Mrs. Dykes	1	0	0	A. G.	0	5	0
J. T. Macfarlan	0	2	6	HALIFAX, NOVA SCOTIA.			
John Adams	0	2	6	April 15.			
Miss Hamilton	0	2	6	Per Captain Moody	6	0	0
Mrs. Barr	0	5	0	Statement of Account.			
				αThe Bishop of Nova Scotia	1	1	0
				dols.			
				αP. C. Hill, Esq.	5	00	
				αB. H. Collins, Esq.	5	00	
				αRev. J. C. Edghill	2	50	
				αRev. W. H. Bullock	2	50	
				Lunenburg Rural			
				Deanery	5	00	
				Sale of Photographs	2	00	
				NEW BRUNSWICK.			
				αMrs. and Miss Parker	2	00	
					24	00	
					4	19	0

# LIST OF SUBSCRIPTIONS.

## HUDDERSFIELD.

	£	s.	d.		£	s.	d.
Return for quarter ending Mar. 31, 1872 :—				Paid for Advertisements—			
Rev. Marmaduke Miller (don.)	0	10	0	“Weekly News” .....	0	14	8
αHenry Barker .....	1	1	0	“Chronicle” .....	0	6	0
				“Examiner” .....	1	1	0
					2	1	8
	1	11	0	Subscription and Donations ...	1	11	0
				Balance due to Secretary .....	0	10	8

## HALIFAX.

	£	s.	d.
April 29.—J. Waterhouse, Esq.	1	1	0
Mar. 23.—αMrs. W. H. Rawson	1	1	0
„ αRev. A. L. W. Bean	1	1	0

## HULL.

The following circular has been issued :—  
PALESTINE EXPLORATION FUND.

LOCAL ASSOCIATION FOR HULL AND  
NEIGHBOURHOOD.

Chairman—COLONEL FRANCIS, R.E.

Hon. Secretaries.

REV. E. JACKSON, M.A.

J. P. BELL, M.D.

Hon. Treasurers—MESSRS. BREEDS.

We beg to invite your attention to the enclosed Prospectus, which briefly enumerates the objects for which the above Fund has been instituted.

The work of the Society is maintained by means of subscriptions, donations, proceeds of lectures, and by the sale of publications and photographs.

Annual Subscribers of 10s. 6d. and upwards are entitled (post free) to the *Quarterly Statement of Progress*, as well as to other privileges connected with the publications of the Society.

Of the importance and interesting nature of the investigation, it is needless for us to speak.

May we ask if you will kindly aid in carrying on this work ?

We are,

Yours truly,

E. JACKSON,  
Holy Trinity, Hull.

JOHN P. BELL,  
Waverley House, Hull.

Hon. Secs.

## List of Subscriptions.

	£	s.	d.
J. Pearson Bell, M.D. ....	1	1	0
Messrs. Breeds.....	0	10	6
Rev. J. Byron, M.A. ....	1	1	0
Theophilus Carrick.....	1	1	0
E. J. Cook ....	1	1	0
J. Spyvee Cooper .....	0	5	0
Rev. J. Ellam .....	0	10	6
Colonel Francis, R.E.....	1	1	0
Rev. F. F. Goe, M.A.....	1	1	0
J. H. Hill .....	1	0	0
J. F. Holden .....	0	5	0
Rev. E. Jackson, M.A. ....	1	1	0
Wm. Jameson .....	1	1	0
W. Leetham.....	1	1	0
Rev. Dr. Mackay .....	0	10	6
Jas. Pyburn, M.D. ....	1	1	0
Miss E. Radford .....	0	10	6
Wm. Sissons .....	1	1	0
Henry Soulby, M.D. ....	0	10	6
Captain Stirling, R.N. ....	1	1	0

## IRVINE.

April 29.—Per Hugh Alexander, Esq..... 7 13 8

## Statement of Account.

George Brown, Esq. £2	0	0
John Paterson, Esq.	0	10 6
A. Gilmour, Esq. ...	1	1 0
W. Christie, Esq. ...	0	10 6
Miss Macfie .....	1	0 0
Rev. John F. Jaffrey	1	0 0
Mrs. H. Alexander	0	10 6
Smaller .....	2	4 6

8 17 0

Printing, &c.... 1 3 4

7 13 8

# LIST OF SUBSCRIPTIONS.

## IPSWICH.

June 14.—By cash .....£10 16 0  
 Mar 22.—aRev. J. Hammond ..... 1 1 0

### Statement of Accounts.

Subscriptions—	£	s.	d.	Expenses—	£	s.	d.	
Lord Gwydyr .....	1	0	0	Stamps and Envelopes .....	0	7	6	
Rev. W. Potter .....	1	1	0	Printing Slips .....	0	3	0	
— Frazer, Esq. ....	1	1	0					
Rev. J. R. Turnock .....	0	10	0			0	10	6
Rev. S. Garratt .....	1	1	0					
Mr. R. M. Miller .....	1	0	0					
E. Grimwade, Esq. ....	1	1	0					
S. Westhorpe, Esq. ....	0	10	6					
The Archdeacon of Suffolk ..	1	1	0					
F. C. Cobbold, Esq. ....	1	0	0					
G. C. E. Bacon, Esq. ....	1	0	0			11	6	6
W. Brown, Esq. ....	1	1	0			0	10	6
	11	6	6	Remitted .....	10	16	0	

## LIVERPOOL.

The Committee will be very glad to receive offers from gentlemen in Liverpool to form an Association.

June 10.

aRev. Edward Hassan ..... 1 1 0  
 aRev. W. Davies ..... 1 1 0  
 aMrs. White ..... 1 1 0

## NEWARK.

April 4.

Bishop of Lincoln ..... 5 0 0

## NEWCASTLE-ON-TYNE.

aLiterary and Philosophical Society ..... 3 3 0

## PERTH.

May 31.

W. Belford, Esq. .... 0 10 0  
 Rev. J. S. Scotland, of Erroll ..... 0 5 0  
 Anon., of Erroll ..... 0 5 0

## PLYMOUTH.

May 25.

H. S. B. Wodehouse, Esq. .... 1 1 0  
 Per do., in small sums, as below—  
 Rev. H. A. Greaves £0 5 0  
 J. Tucker ..... 0 3 0

S. N. Serpell .....	£0	2	6				
J. H. Carne .....	0	1	0				
John Carkeet .....	0	2	6				
T. R. A. Briggs.....	0	2	0				
W. Stanbury .....	0	2	0				
Thos. Goard .....	0	5	0				
W. T. Hutchens .....	0	2	6				
L. Hutchens .....	0	2	6				
R. W. Lethbridge...	0	1	0				
W. Angear .....	0	2	6				
H. Evero.....	0	2	0				
J. C. Dyer .....	0	2	0				
Thos. Pitts.....	0	5	0				
W. R. Congdon.....	0	2	0				
Thos. Mitchell .....	0	2	6				
Thos. Hell .....	0	2	6				
					2	7	6
W. C. Nicholson, Esq. ....		0	10				

## PORTSMOUTH.

aRev. F. Baldey ..... 1 1 0

## ST. GERMANS.

June 2.—By Cash..... 3 3 0  
 aRev. A. Furneaux . £1 1 0  
 aJ. Edwards, Esq.... 1 1 0  
 aR. Kerswill, Esq.... 1 1 0  
 3 3 0

## SCARBOROUGH.

The Rev. A. S. Aglen has left Scarborough for Scotland, and consequently resigned his post as Hon. Secretary. His place has been taken by the Rev. J. Bedford, 1, Belgrave Crescent, Scarborough.

# LIST OF SUBSCRIPTIONS.

## SOUTH STOCKTON.

The following Committee of gentlemen has been formed for the Local Association of this town :—

### *Chairman.*

T. Crosby, Esq.

### *Vice-Chairman.*

Rev. G. Roberts.

### *Committee.*

Joseph Craddock, Esq.

P. Dennis, Esq.

W. Dodshon, Esq.

C. Arthur Head, Esq.

J. A. Knight, Esq.

T. T. Saunders, Esq.

J. Strotten, Esq.

Frederick Williams, Esq.

Thomas Wrighton, Esq.

### *Hon. Treasurer.*

Thomas Whitwell, Esq.

### *Hon. Secretary.*

Dr. Joseph Laidler.

## STIRLING.

June 24.—By Cash ..... £11 6 3

Rev. William Taylor £0 10 0

Collected by Miss

Jane Binnie:—

Mrs. Binnie ..... 0 4 0

Miss M'Leod ..... 0 2 6

Miss Robertson ..... 0 2 0

Miss Wright ..... 0 3 0

Mr. M'Dougall ..... 0 2 6

Misses Harvey ..... 0 2 6

Mr. Fernie ..... 0 1 0

Mr. M'Kinlay ..... 0 5 0

Mrs. Kemp ..... 0 2 0

D. M'Ewen ..... 0 5 0

Rev. W. F. Goldie 0 2 6

A Friend ..... 0 3 0

A Friend ..... 0 1 0

A Friend ..... 0 2 0

Captain Webster ... 0 5 0

Mrs. Van Buren ... 0 1 6

£2 4 6

Collected by Miss

Burton:—

Rev. Dr. Keith ..... 0 2 6

Mr. Campbell ..... 0 2 6

Mrs. Galbraith ..... 0 2 6

Major Oliphant ... 0 2 6

Mrs. Carson ..... 0 2 6

£ s. d.

Mr. Chrystal ..... £0 2 6

A Friend ..... 0 1 3

A. M. Burton ..... 0 2 0

A Friend ..... 0 1 0

£0 19 3

Collected by Miss

Strang:—

Peter Drummond... 0 10 0

Archd. Henderson 0 2 6

W. and A. John-

ston ..... 0 2 6

John M'Ewen ..... 0 2 6

Wm. Drydale ..... 0 3 0

Rev. C. Mackenzie 0 5 0

Rev. R. Frew, D.D. 0 5 0

Misses Esam and

Williams ..... 0 2 6

Mrs. Anderson..... 0 2 0

Mr. Todd ..... 0 2 6

Rev. J. T. Gowan-

lock ..... 0 2 6

Dr. Muschett ..... 0 2 6

Mr. M'Luckie ..... 0 5 0

£2 7 6

Collected by Mrs. Van

Buren:—

Dr. Gibson ..... 0 2 6

Misses Stein ..... 0 2 6

Mrs. Gartshore..... 0 5 0

Mrs. M'Micking... 0 5 0

Mrs. Mathison ..... 0 2 6

Mrs. Rae ..... 0 2 0

Mrs. Cuthbertson... 0 2 6

Miss Tytler ..... 0 2 0

Mrs. Bell ..... 0 2 6

Mr. Galbraith ..... 0 10 0

£1 16 6

Collected by Miss

Campbell:—

Mrs. Muir ..... 0 2 6

Misses Aitken ..... 0 2 6

Capt. M. Skinner... 0 10 0

Miss Dawson ..... 0 2 6

Miss Makgill ..... 0 2 6

J. Paton ..... 0 10 0

Mr. Baird ..... 0 1 6

Mrs. Crowe ..... 0 2 6

Misses Struthers ... 0 2 6

Mr. Graham ..... 0 2 0

£1 18 6

Collected by Mrs.

Gray:—

David Yellowlees... 0 5 0

Hugh Gavin ..... 0 2 6



## LIST OF SUBSCRIPTIONS.

	£	s.	d.
J. Gray .....	£0	5	0
Robert Walls .....	0	5	0
Miss Beith .....	0	5	0
William Harvey .....	0	2	6
A. M'Lachlan .....	0	2	6
Mrs. Milroy .....	0	2	6
	£1	10	0
	£11	6	3

Stirling, 22nd June, 1872.—The foregoing is a list of subscribers and collectors, with the sums subscribed, in Stirling, in behalf of the Palestine Exploration Fund, for the year now ended.

WILLIAM TAYLOR,  
*Hon. Local Secretary.*

STROUD.	£	s.	d.
List of Subscribers.			
Mr. William Miles .....	0	10	6
J. H. Carpenter, Esq. ....	0	10	6
Sidney Biddell, Esq. ....	5	0	0
L. W. Winterbotham, Esq. ...	1	1	0
George Gillson, Esq. ....	0	10	6
Frederick Roberts, Esq. ....	1	0	0

TEIGNMOUTH.

April 26.

Per Rev. Henry Hutchings, viz. :—	2	6	6
Miss Stooks .....	£1	1	0
W. A. Hunt, Esq. ...	0	10	0
Rev. E. Strong .....	0	5	0
Rev. H. Hutchings	0	10	6

## TUNBRIDGE WELLS.

*Hon. Sec.*—Captain Palmer, R.E.

May 3.—

αColonel Hebbert .....	£1	0	0
αMiss Hebbert.....	0	10	0
αColonel Cantis .....	0	10	0
June.—By Cash .....	78	11	6

### Statement of Accounts.

<i>Receipts.</i>	<i>£</i>	<i>s.</i>	<i>d.</i>	<i>Disbursements.</i>	<i>£</i>	<i>s.</i>	<i>d.</i>
Lecture at Penshurst, January 15th, by Captain Palmer, R.E.	7	12	0	Postage .....	1	0	4
Collection after meeting at Tunbridge Wells, May 9th .....	23	17	8	Printing and advertising .....	5	3	4
Donations—				Illustrating lecture .....	2	2	0
John Heugh, Esq. ....	50	0	0	Hire of room for meeting ...	2	2	0
Rev. F. H. Hichens .....	1	0	0	Fly-hire and sundry disbursements .....	1	2	6
Captain Hardinge, R.N. ....	3	3	0	Balance to close account (per cheque herewith) .....	78	11	6
Annual Subscriptions—							
W. J. Blackburne Maze, Esq.	2	2	0				
— Bartram, Esq. ....	1	1	0				
W. B. Maingay, Esq. ....	1	1	0				
Rev. J. R. Thompson .....	0	5	0				
	90	1	8		90	1	8

H. E. PALMER, Captain R.E.

6th June, 1872.

# LIST OF SUBSCRIPTIONS.

WINCHESTER.	£	s.	d.
aMiss Zornlin .....	1	0	0

## WINDSOR.

The following circular has been issued:—

DEAR SIR,

*May, 1872.*

Having been appointed Local Honorary Secretary to the PALESTINE EXPLORATION FUND, I beg leave to send you a short Prospectus of the work; and to ask you to become a subscriber.

Subscriptions vary from half-a-crown to ten pounds; and may be paid into the

Palestine Exploration Fund account, at Messrs. Neville Reid & Co.'s Bank, at the London and County Bank, or to myself.

*Quarterly Statements*, with the most recent and interesting details of the work, are sent free to all subscribers of one guinea a year.

As this is a subject which cannot fail to interest all readers of the Bible, I do not hesitate to appeal to your liberality to support the work.

Believe me,

Yours faithfully,

H. C. HAWTREY.

*Rectory Cottage, Alma Road,  
Windsor.*

## LECTURES.

## LIST OF LECTURES.

								Receipts.		
								£	s.	d.
By the Rev. Henry Geary—										
March	18.	Harrow	...	...	...	...	...	9	4	0
"	19.	Huntingdon	...	...	...	...	...	4	13	0
"	21.	Newark	...	...	...	...	...	6	9	1
"	22.	Macclesfield	...	...	...	...	...	4	12	0
April	2.		...	...	...	...	...	4	6	8
"	22.	St. Matthew's, Bayswater	...	...	...	...	...	4	2	7
May	2.	Bath	...	...	...	...	...	15	14	1
"	3.	Clifton	...	...	...	...	...	19	15	6
"	15.		...	...	...	...	...	9	8	10
By the Rev. G. St. Clair—										
March	18.	Liverpool	...	...	...	...	...	6	5	4
"	19.	Kendal	...	...	...	...	...	31	1	9
"	20.	Whitehaven	...	...	...	...	...	8	17	6
"	21.	Keswick	...	...	...	...	...	6	15	9
"	22.	Workington	...	...	...	...	...	5	2	4
"	27.	Normanby	...	...	...	...	...	3	12	1
April	8.	Bothwell	...	...	...	...	...	4	1	0
"	9.	Irvine	...	...	...	...	...	0	9	6½
"	10.	Coatbridge	...	...	...	...	...	8	12	0
"	11.	Kilbarnock	...	...	...	...	...	8	7	4½
By the Rev. Dr. Geikie—										
April	25.		...	...	...	...	...	6	16	9
October	19.	Cambridge Heath	...	...	...	...	...	3	3	8
November	8.	Edmonton	...	...	...	...	...	1	6	3
"	9.	Belgrave Presbyterian Church	...	...	...	...	...	4	18	2
"	21.	Hersham	...	...	...	...	...	1	6	1½
"	22.	Islington Presbyterian Church	...	...	...	...	...	2	7	3
"	23.	York Road Chapel	...	...	...	...	...	1	1	9
"	30.	Holloway Chapel	...	...	...	...	...	3	9	0
December	5.	Southgate Road Church	...	...	...	...	...	1	8	8
"	7.	Blackheath	...	...	...	...	...	2	6	4
"	13.	Uxbridge	...	...	...	...	...	3	3	9
"	21.	Wanstead	...	...	...	...	...	1	13	11
1872. Jan.	30.	Victoria Park	...	...	...	...	...	0	13	6
February	2.	Titchfield Street	...	...	...	...	...	6	3	5½
"	8.	Red Hill	...	...	...	...	...	5	0	3
"	22.	Guildford	...	...	...	...	...	5	0	11½
"	23.	Highgate	...	...	...	...	...	1	10	6
By the Rev. A. E. Northey—										
March	21.	Sevenoaks	...	...	...	...	...	1	5	0

# LOCAL ASSOCIATIONS.

## FROM THE LECTURE LISTS.

These donations are included in the amounts published in the Lecture Lists. Some of the names will also be found under the head of Local Societies.

### Subscriptions announced :—

<i>a</i> Colonel Carrick Buchanan, of Drumpellier	...	...	...	£5	0	0
<i>a</i> Alex. Whitelaw, Esq., Gartsherrie House, Glasgow	...	...	...	5	0	0
Ex. Provost Brown, Irvine	...	...	...	2	0	0
W. Shaw, Esq., Elmwood, Bothwell	...	...	...	1	1	0
Mrs. Christie, Wardie Villa, Bothwell	...	...	...	0	10	0
<i>a</i> G. E. Moser, Esq., Kendal (for five years)	...	...	...	2	2	0
<i>a</i> James Cropper, Esq. (for four years)	...	...	...	1	1	0

### Subscriptions paid—

#### Kendal :—

<i>a</i> Ven. Archdeacon Cooper	...	...	...	...	1	1	0
<i>a</i> E. Crewdson	...	...	...	...	1	1	0
Mrs. Col. Procter	...	...	...	...	5	0	0
<i>a</i> T. Green, Esq. (five years)	...	...	...	...	1	1	0
<i>a</i> J. Whitwell Wilson, Esq. (three years)	...	...	...	...	1	1	0
J. J. Wilson, Esq.	...	...	...	...	1	1	0
R. Somerville, Esq.	...	...	...	...	0	10	6
C. L. Braithwaite, Esq.	...	...	...	...	1	1	0
Isaac Braithwaite, Esq.	...	...	...	...	2	0	0

#### Whitehaven :—

J. F. I'Anson, Esq., M.D.	...	...	...	...	1	1	0
W. Kitchen, Esq.	...	...	...	...	0	10	6
<i>a</i> Rev. W. Ward Jackson, J.P.	...	...	...	...	0	10	0
<i>a</i> Rev. Charles Bailey	...	...	...	...	0	10	0

#### Workington :—

<i>a</i> Rev. J. J. Thornley	...	...	...	...	0	10	0
<i>a</i> John Moody, Esq.	...	...	...	...	0	10	6
C. T. Valentine, Esq.	...	...	...	...	0	10	6

#### Keswick :—

<i>a</i> Rev. Canon Battersby	...	...	...	...	0	10	6
<i>a</i> Mrs. Battersby	...	...	...	...	0	10	6
<i>a</i> Rev. A. Howson	...	...	...	...	1	1	0

#### Liverpool :—

Mrs. M'Conkey (for four years)	...	...	...	...	1	1	0
--------------------------------	-----	-----	-----	-----	---	---	---

## PUBLICATIONS OF THE SOCIETY.

Nos. 1 to 6.—The earlier papers, which have mostly been embodied in subsequent publications, are now out of print.

- Captain Warren's Notes on the Valley of the Jordan and Excavations at Ain es Sultan (Jericho).
- Dean Stanley's Sermon on the Exploration of Palestine. Price 6d.

## LOCAL ASSOCIATIONS.

### 9—15. Quarterly Statement. Vol. I. Nos. I. to VII.

These Nos. are now all out of print, except 5, 6, and 7, which contain, among other matter—The History of the Moabite Stone—Captain Warren on Lebanon and the Temples of Cœle-Syria—Captain Warren's Journey to East of Jordan—Letters from Mr. E. H. Palmer—Mr. Simpson on the Royal Quarries—Plan of the Haram Area, showing Excavations—&c., &c.

### 16—19. Quarterly Statement. New Series. Nos. I. to IV., 1871, containing—

The Desert of the Tih and the Country of Moab, by Mr. E. H. Palmer, with large map and illustrations—Map of Moab—Captain Warren on the Plain of Philistia—Mr. Palmer on the Lebanon—M. Clermont Ganneau on certain New Discoveries—The Building of the Mosque of Omar, by Mr. E. H. Palmer—Captain Warren's Latitudes and Longitudes—Mr. Hyde Clarke on the Pre-Israelite Inhabitants of Palestine—&c., &c.

### 20. Quarterly Statement. Jan., 1872,

Containing Letters and Communications from Mr. Grove, Captain Burton, Rev. F. W. Holland, Mr. C. F. Tyrwhitt Drake, Mr. Samuel Sharpe, Mr. Dugald Campbell, Dr. Alexander Buchan, and Capt. Stewart, R.E.

### 21. Quarterly Statement. April, 1872.

Reports from Captain Stewart and Mr. Tyrwhitt Drake—Papers from Captain Wilson, Rev. H. E. Northey, Mr. J. E. Bailey, Mr. Hyde Clarke, &c., &c., &c.

### 22. Quarterly Statement. July, 1872.

---

## LOCAL ASSOCIATIONS.

ALLOA : *Hon. Sec.*—Rev. Alexander Bryson.

ABERDEEN : *Hon. Sec.*—Rev. Prof. Milligan, D.D.

ALNWICK : *Hon. Sec.*—Edward Allen, Esq.

ARBROATH : *Hon. Sec.*—Mr. Anderson,

ASHFORD : *Hon. Sec.*—F. A. Dewé, Esq.

AYR : *Hon. Sec.*—Robert Murdoch, Esq.

BASINGSTOKE : *Hon. Sec.*—Rev. W. Marriner,

BATH : *Hon. Sec.*—Rev. T. P. Methuen.

BEDFORD : *Hon. Sec.*—E. W. Ransom, Esq.

BIRKENHEAD : *Hon. Secs.*—Rev. J. T. Kingsmill and T. Bell, Esq., St. Aidan's College.

BIRMINGHAM : *Hon. Sec.*—Rev. Charles Evans.

BLACKBURN : *Hon. Secs.*—Rev. Canon Birch and Rev. A. B. Grosart.

BRADFORD : *Hon. Sec.*—Rev. W. Dyson.

BRIGHTON : *Hon. Sec.*—Rev. C. E. Douglass.

BROADSTAIRS : *Hon. Sec.*—Rev. J. H. Carr.

BURNLEY : *Hon. Sec.*—Rev. H. Stamer.

BURY ST. EDMUNDS : *Hon. Sec.*—H. Prigg, Esq., Jun.

BURY : *Hon. Treas.*—Rev. J. Hornby ; *Hon. Sec.*—Rev. W. Thorburn.

CALLINGTON : *Hon. Sec.*—Rev. F. V. Thornton.

CAMBRIDGE : *Hon. Sec.*—Rev. T. G. Bonney, Tutor of St. John's College.

CANADA: Toronto.—Subscriptions are kindly received by the Hon. G. W. Allan.

CARDIFF : *Hon. Sec.*—



## LOCAL ASSOCIATIONS.

- CHELMSFORD : *Hon. Sec.*—H. S. Coleman, Esq.  
 CHELTENHAM : *Hon. Sec.*—Dr. E. Wilson.  
 CHESTER : *Hon. Sec.*—The Very Rev. the Dean of Chester.  
 CHIGWELL : *Hon. Sec.*—Rev. H. M. Robinson.  
 CHIPPENHAM : *Hon. Sec.*—A. T. Keary, Esq.  
 CLIFTON and BRISTOL : *Hon. Sec.*—Rev. C. H. Wallace.  
 COUPAR ANGUS : *President*—Very Rev. Dean Torry.  
 CROYDON : *Hon. Sec.*—Mr. Warren.  
 DEVIZES : *Hon. Sec.*—Rev. W. P. S. Bingham.  
 DEVONPORT : *Hon. Sec.*—J. Venning, Esq.  
 DORCHESTER : *Hon. Sec.*—Rev. Handley Moule.  
 DOVER : *Hon. Sec.*—Mr. W. P. Mummery.  
 DUNDEE : *Hon. Sec.*—R. Mackenzie, Esq.  
 DURHAM : *Hon. Sec.*—Rev. J. Dodd.  
 DUNFERMLINE : *Hon. Sec.*—Rev. And. Brydie.  
 EASTBOURNE : *Hon. Sec.*—Rev. H. R. Whelpton.  
 EDINBURGH : *Hon. Sec.*—Rev. W. Lindsay Alexander, D.D., and A. Johnston, Esq., F.R.G.S., 4, St. Andrew Square.  
 EXETER : *Hon. Sec.*—Rev. Prebendary Acland, Broad Clyst.  
 FALMOUTH, for the County of Cornwall : *Hon. Secs.*—A. Lloyd Fox and W. P. Dymond, Esq.  
 FAVERSHAM : *Hon. Sec.*—Charles Smith, Esq.  
 FORFAR : *Hon. Sec.*—T. Wilkie, Esq.  
 FROME : *Hon. Sec.*—Rev. T. G. Rooke.  
 FOLKESTONE : *Hon. Sec.*—  
 GLASGOW : *Hon. Secs.*—Rev. W. Dickson, D.D., and A. B. M'Grigor, Esq.  
 GLOUCESTER : *Hon. Secs.*—Rev. J. Bowman and F. Cooke, Esq.  
 GREENOCK : *Hon. Sec.*—D. MacDonald, Esq.  
 GUILDFORD : *Hon. Sec.*—Capt. Campbell, R.N.  
 HALIFAX : *Hon. Sec.*—  
 HALSTEAD : *Hon. Secs.*—Rev. S. J. Eales and Rev. J. W. Coombes.  
 HASTINGS : *Hon. Sec.*—T. Dearing, Esq.  
 HELENSBURG : *Hon. Sec.*—Rev. A. Murray McCallum.  
 HERTFORD : *Hon. Sec.*—W. M. Armstrong, Esq.  
 HEXHAM : *Hon. Sec.*—John Hope, Esq., jun.  
 HUDDERSFIELD : *Hon. Sec.*—Henry Barker, Esq., Railway St., St. George's Sq.  
 HULL : *Hon. Sec.*—Dr. Bell.  
 HUNTINGDON : *Hon. Sec.*—Rev. Gerald Vesey.  
 INVERNESS : *Hon. Sec.*—Capt. Bolland, R.F.  
 IPSWICH : *Hon. Sec.*—Rev. J. R. Turnock.  
 KIRKALDY : *Hon. Sec.*—John Barnett, Esq.  
 LEEDS : *Hon. Sec.*—Edward Atkinson, Esq.  
 LEITH : *Hon. Sec.*—A. Davies, Esq.  
 LEWES : *Hon. Sec.*—Rev. R. Straffen.  
 LISKEARD : *Hon. Treas.*—John Eliot, Esq. ; *Hon. Sec.*—Rev. Dr. Ritchie.  
 MALVERN : *Hon. Sec.*—Rev. D. F. A. Grahame.  
 MANCHESTER : *Hon. Sec.*—Rev. W. Crane.  
 MANSFIELD : *Hon. Sec.*—T. W. Clarke, Esq.  
 MARCH : *Hon. Sec.*—Rev. J. Cater.  
 MARGATE : *Hon. Sec.*—Rev. G. Collis.

## LOCAL ASSOCIATIONS.

- MIDDLESBOROUGH : *Hon. Sec.*—Rev. V. H. Moyle.  
 MONTROSE : *Hon. Sec.*—Mr. Mackie.  
 NEWARK : *Hon. Sec.*—Evelyn Falkner, Esq.  
 NEWARK : Ladies' Committee. *Hon. Treas.*—Mrs. Tallents ; *Hon. Sec.*—Mrs. G. Hodgkinson.  
 NEWBURY : *Hon. Sec. pro tem.*—Rev. J. L. Randal.  
 NEWCASTLE : *Hon. Treasurer.*—Thomas Hodgkin, Esq. ; *Hon. Sec.*—W. Lyall, Esq.  
 NEWPORT PAGNELL : *Hon. Sec.*—F. Tayler, Esq.  
 OLNEY : *Hon. Sec.*—W. Hipwell, Esq.  
 OXFORD : *Hon. Secs.*—Rev. Professor Rawlinson and Rev. Edwin Hatch.  
 PAISLEY : *Hon. Sec.*—Rev. J. Dods.  
 PERTH : *Hon. Sec.*—John W. Jameson, Esq.  
 PLYMOUTH : *Hon. Secs.*—J. B. Rowe, Esq., and J. Shelley, Esq.  
 PORTSMOUTH : *Hon. Sec.*—  
 REIGATE and REDHILL : *Hon. Sec.*—W. Wilson Saunders, Esq.  
 RICHMOND : *Hon. Sec.*—R. R. Alexander, Esq.  
 SCARBOROUGH : *Hon. Sec.*—Rev. J. Bedford.  
 SEVENOAKS : *Hon. Sec.*—Graham Jackson, Esq.  
 SOUTHPORT : *Hon. Sec.*—George Lee, Esq.  
 SHERBORNE : *Hon. Sec.*—J. Farmer, Esq.  
 SOWERBY : *Hon. Sec.*—Rev. A. L. W. Bean.  
 ST. ALBANS : *Hon. Sec.*—Rev. W. J. Lawrance.  
 ST. ANDREW'S : *Hon. Secs.*—Dr. Lees and Dr. Mitchel.  
 ST. GERMANS : *Hon. Sec.*—R. Kerswill, Esq.  
 STIRLING : *Hon. Sec.*—Rev. W. Taylor.  
 STROUD : *Hon. Sec.*—T. S. Osborne, Esq.  
 TAUNTON : *Hon. Sec.*—R. J. Shepherd, Esq.  
 TAVISTOCK : *Hon. Sec.*—Mr. Frederick Clarke.  
 TIVERTON : *Hon. Sec.*—J. Allen, Esq.  
 TUNBRIDGE WELLS : *Hon. Sec.*—Capt. Palmer, R.E.  
 UXBRIDGE : *Hon. Sec.*—J. Hunt, Esq., F.R.G.S.  
 WARMINSTER : *Hon. Sec.*—W. Frank Morgan, Esq.  
 WELLS : *Hon. Sec.*—W. I. Welsh, Esq.  
 WESTON-SUPER-MARE : *Hon. Secs.*—Capt. T. Townsend, R.E., and J. Titley, Esq.  
 WHITBY : *Hon. Sec.*—E. W. Chapman, Esq.  
 WILLESDEN : *Hon. Sec.*—Rev. J. Crane Wharton.  
 WINCHESTER : *Hon. Sec.*—Miss Zornlin.  
 WINDSOR : *Hon. Sec.*—Rev. H. Courtenay Hawtrey.  
 WORCESTER : *Hon. Sec.*—Rev. Francis J. Eld.  
 YARMOUTH : *Hon. Sec.*—Rev. H. R. Nevill.

---

## PHOTOGRAPHS.

The photographs issued by the Fund can be purchased of Mr. Edward Stanford, 6 and 7, Charing Cross, at the following rates:—

- |  |               |
|--|---------------|
| To Non-Subscribers ...                     | 1s. 6d. each. |
| To Annual Subscribers of half-a-guinea ... | 1s. 0d. each. |

Catalogues and Lists can be obtained at the Agents' or the Society's Offices.

Agents are also established in the different towns, and the Secretary will be glad to hear from any person desirous of undertaking the agency.

## THE "SEAL OF HAGGAI."

Casts of this small seal, which is of very great antiquity, have been taken. They can be procured at 2s. 6d. each.

---

## THE MOABITE STONE.

Facsimile casts of the small fragments have been taken. They can be procured at cost price.

Photographs (to be obtained of Mr. Edward Stanford)—

1. One-third size of Captain Warren's tracings (mounted)... £0 3 6
  2. Full size of the squeezes themselves, in four photographs... 2 10 0
- 

## THE HAMAH INSCRIPTIONS.

Photographs of the squeezes have been taken, and can now be procured.

---

## ERRATA IN PREVIOUS LIST.

For W. H. Dickenson read H. M. Wilkinson.

Falmouth and Cornwall List.—Insert the name Rev. J. W. Murray, 10s.

Feb. 7. Tiverton Subscription List.—The name of H. Stokes, Esq., 10s., was omitted.

---

# LIST OF SUBSCRIPTIONS.

JUNE 24TH TO SEP. 23RD, 1872.

*a* denotes Annual Subscriber.

\* \* \* If any omission or mistake be observed in the following lists, the Secretary will be glad to be informed of it, and will rectify the error in the next *Quarterly Statement*.

	£	s.	d.		£	s.	d.
<i>a</i> Rev. J. Hammond .....	1	1	0	<i>a</i> S. Powell, Esq. ....	1	1	0
<i>a</i> Mrs. Hampton .....	1	1	0	<i>a</i> Messrs. Thorp Bros. ....	1	1	0
Whateley Balme, Esq. ....	10	0	0	<i>a</i> Miss Vickers .....	1	1	0
G. H. Gibb, Esq. ....	5	5	0	<i>a</i> Rev. Llewellyn Jones .....	1	1	0
G. H. Muir, Esq. ....	0	10	6	<i>a</i> J. G. Minshull, Esq. ....	0	10	6
<i>a</i> Miss Williams .....	1	1	0	<i>a</i> Rev. John Brooke .....	1	0	0
<i>a</i> Mrs. Walker .....	1	1	0	<i>a</i> Miss Brooke .....	0	10	0
<i>a</i> Dr. Dutfield .....	0	10	6	<i>a</i> Alfred Wraith, Esq. ....	0	10	6
<i>a</i> Miss Warren .....	1	0	0	<i>a</i> J. Brown, Esq. ....	1	1	0
<i>a</i> Captain Petrie .....	0	10	6	<i>a</i> Rev. H. R. Moody .....	1	1	0
<i>a</i> H. S. Perry, Esq. ....	1	0	0	<i>a</i> Rev. J. Ingham Brooke .....	1	1	0
Collected by W. Appleford, Esq. ....	0	8	0	<i>a</i> Dr. A. Jackson .....	1	1	0
<i>a</i> General Stanhope .....	1	1	0	<i>a</i> Mrs. Hamilton .....	1	1	0
Prov. G. Chap., N. and E.				<i>a</i> J. Benham, Esq. ....	1	1	0
Ridings, Yorkshire .....	1	1	0	<i>a</i> J. P. Bacon, Esq. ....	5	0	0
<i>a</i> Miss Sharpe .....	0	10	6	<i>a</i> Rev. E. D. Stone .....	2	2	0
W. Robinson, Esq. ....	1	1	0	<i>a</i> W. Hastings, Esq. ....	1	1	0
Sir George Baker .....	5	0	0	<i>a</i> Rev. J. Stewart Wilson .....	1	0	0
<i>a</i> J. Lindon, Esq. ....	1	1	0	<i>a</i> Mrs. Guise .....	1	0	0
<i>a</i> Rev. C. Spencer Stanhope .....	1	1	0	<i>a</i> J. Harris Heal, Esq. ....	1	1	0
Rev. H. A. Crosbie .....	1	1	0	<i>a</i> J. A. Murray, Esq., for 1872...	0	10	6
<i>a</i> Miss J. J. Pimm .....	1	1	0	Do. 1873...	0	10	6
<i>a</i> Miss Chambers .....	1	1	0	<i>a</i> Miss Fisher .....	1	1	0
<i>a</i> J. Foster, Esq. ....	0	10	6	<i>a</i> J. A. Southwell, Esq. ....	1	1	0
<i>a</i> R. Clayton-Browne, Esq., jun. ....	1	1	0	Rev. H. Sturt .....	0	10	6
<i>a</i> Rev. G. H. Scott .....	0	10	0	John Clark, Esq. ....	1	0	0
<i>a</i> Miss Davis .....	1	0	0	J. Forster, Esq. ....	0	10	6
<i>a</i> J. Morris, Esq. ....	1	1	0	<i>a</i> W. Wotherspoon, Esq. ....	1	0	0
<i>a</i> A. W. Hume, Esq. ....	1	1	0	<i>a</i> Mrs. Muir .....	0	10	0
<i>a</i> Major Montagu .....	1	1	0	<i>a</i> Rev. Henry Allon .....	1	1	0
<i>a</i> J. Austin, Esq. ....	2	2	0	<i>a</i> J. S. Wright, Esq. ....	1	1	0
J. H. Wright, Esq. ( <i>a</i> £1 ls.)				<i>a</i> J. Carr, Esq. ....	1	1	0
for 1871 and 1872 .....	2	2	0	<i>a</i> R. B. Annesley, Esq. ....	1	1	0
<i>a</i> T. J. Kent, Esq. ....	2	2	0	<i>a</i> T. Dobson, Esq. ....	1	1	0
<i>a</i> A. Wark, Esq. ....	1	1	0	<i>a</i> J. Macdonald, Esq. ....	1	1	0
F. Howard, Esq. ....	2	2	0	<i>a</i> Mrs. Straight .....	0	10	0
<i>a</i> Miss Peachey .....	1	1	0	S. Ranyard, Esq. ....	2	2	0
<i>a</i> J. W. Ward, Esq. ....	0	10	0	<i>a</i> Miss Anne Stock .....	1	1	0
<i>a</i> H. Richardson, Esq. ....	1	1	0	<i>a</i> Rev. F. F. Goe .....	1	1	0
<i>a</i> R. Dawbarn, Esq. ....	1	1	0	<i>a</i> Lord Lawrence .....	5	0	0
<i>a</i> R. Dawbarn, Esq., jun. ....	1	1	0	<i>a</i> Mrs. Huish .....	1	1	0
<i>a</i> Mrs. Wells .....	0	10	0	<i>a</i> Rev. E. T. Prust .....	1	1	0

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
aRev. J. Temperley Grey.....	0	5	0	aJ. Swann, Esq. ....	1	1	0
aMrs. Johnson .....	0	10	6	aJ. Pollard, Esq. ....	1	1	0
aT. Oxley, Esq. ....	0	10	6	aJ. Connell, Esq. ....	1	1	0
aJosiah Evans, Esq. ....	2	2	0	aJohn Bewlay, Esq. ....	1	1	0
aJoseph Evans, Esq. ....	2	2	0	aVen. Archdeacon Boutflower...	2	2	0
aE. Akroyd, Esq., M.P. ....	1	1	0	aT. Ward, Esq. ....	1	1	0
T. T. Houghton, Esq. (a£1) ...	5	0	0	aMiss Ward .....	0	10	6
aC. F. Fellows, Esq. ....	5	0	0	aCaptain Taylor .....	0	10	6
aR. W. Mummery, Esq. ....	0	10	0	Mrs. Calvert Jones .....	1	0	0
aJohn Polson, Esq. ....	1	0	0	aMiss Yates .....	2	0	0
aRev. W. Turner .....	0	10	6	aF. Harmer, Esq. ....	1	1	0
Rev. S. A. Tipple .....	1	1	0	aRev. E. P. Eddrup, for 1872...	0	10	6
aRev. E. B. Badcock .....	1	1	0	Ditto 1871...	0	10	6
aProf. Donaldson .....	1	1	0	aRev. T. G. Horton .....	0	10	6
aA. Macalpine, Esq. ....	0	10	6	aMiss Bromehead .....	1	1	0
aW. C. Steele, Esq. ....	1	1	0	aMiss M. A. Shilleto .....	1	1	0
aA. Dunn, Esq. ....	1	1	0	aT. Engall, Esq. ....	1	1	0
aA. Carson, Esq. ....	1	1	0	aMrs. King .....	0	10	0
aBrice Smith, Esq. ....	1	1	0	aRev. S. Lyson .....	1	0	0
aRev. W. W. Dickenson, for 1873	1	1	0	aA. T. Keary, Esq. ....	0	5	0
aW. P. Jarrold, Esq. ....	1	1	0	aRev. H. K. Bolden .....	0	5	0
aMiss Douglas .....	1	1	0	aW. Coats, Esq. ....	1	1	0
aRev. O. Dykes .....	1	1	0	aJ. M. Irvine, Esq. ....	0	10	6
aMiss S. Lane .....	0	10	6	J. H. Shorthouse, Esq. ....	2	2	0
aW. P. Mackey, Esq. ....	0	10	6	aJ. O. Church, Esq. ....	1	1	0
aJ. Silvester, Esq. ....	1	1	0	aSunday School Union .....	5	0	0
aW. F. Paul, Esq. ....	0	10	6	aW. Collingford, Esq. ....	0	10	6
aA. H. Lees, Esq. ....	1	1	0	Ditto for 1872 .....	0	10	6
aJ. Bell, Esq. ....	1	1	0	aH. Segar, Esq. ....	1	1	0
aW. Bliss, Esq. ....	1	1	0	aH. Segar, Esq., jun. ....	1	1	0
aMiss Lindsay .....	1	1	0	aG. Pritt, Esq. ....	1	1	0
aC. R. Cope, Esq. ....	1	0	0	Colonel Haig .....	3	3	0
aC. H. Hawkins, Esq. ....	0	10	0	aJ. Nutter, Esq. ....	0	10	6
aMiss Robson .....	1	1	0	aJ. H. Spurr, Esq. ....	0	10	6
aP. Cater, Esq. ....	1	1	0	aG. F. White, Esq. ....	1	1	0
aRev. C. G. Chittenden .....	1	1	0	aRev. C. Alletson .....	1	1	0
aRev. J. Martin .....	0	10	6	aRev. J. H. Tooke .....	1	0	0
aHon. H. Roper Curzon .....	1	1	0	aW. Hanks, Esq. ....	1	1	0
aMrs. Cleaver .....	1	1	0	aRev. J. Taylor .....	1	1	0
aR. H. Dawson, Esq. ....	1	1	0	aJ. Marshall, Esq. ....	1	1	0
G. R. Gordon, Esq. ....	1	1	0	aW. Peppercorn, Esq. ....	0	10	6
aG. Duncan, Esq. ....	1	1	0	aH. S. Goodchild, Esq. ....	1	1	0
aF. Gordon, Esq. ....	1	1	0	aJ. L. Budden, Esq. ....	1	1	0
aR. T. Turnbull, Esq. ....	1	1	0	aR. R. Kally, Esq., M.D. ....	0	10	6
aJ. Grant, Esq. ....	1	1	0	aJ. Morley, Esq. ....	0	10	6
aR. M. Greenwood, Esq. ....	1	1	0	aC. H. H. Wright, Esq. ....	0	10	0
aMiss Lawrence .....	0	10	6	aRev. J. Hebden .....	0	10	0
G. M. Hicks, Esq. ....	5	5	0	aMrs. Clarkson .....	1	1	0
E. G. Flocks, Esq. ....	0	10	0	aJ. F. Horniman, Esq. ....	1	1	0
C. Lambert, Esq. (a 10s.) ...	0	12	0	Rev. A. Fuller .....	0	10	6
aRev. W. Griffith .....	1	1	0	Mrs. Buchanan, collected by...	0	12	6
aC. Fraser, Esq. ....	1	1	0	aRev. J. Bastow .....	0	10	6
aRev. F. Gell. ....	1	1	0	aT. Greenhalgh, Esq. ....	1	1	0
aJ. White, Esq. ....	1	1	0	aJ. Wood, Esq. ....	2	2	0
aJ. C. White, Esq. ....	1	1	0	H. Vaughan, Esq. ....	10	0	0
aRev. Dr. Stoughton .....	1	1	0	aRobert Howie, Esq. ....	0	10	6
aJ. Robinson Wright, Esq. ....	5	0	0	Rev. Dr. Jessopp .....	1	1	0
aT. B. Sprague, Esq. ....	5	0	0	Ditto for 1871 .....	1	1	0
aG. Ashworth, Esq. ....	1	1	0	Miss J. Coddington .....	0	10	6



# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
Miss L. Coddington .....	0	10	6	aRev. R. E. Edwards .....	1	1	0
aJ. Le Mare, Esq. ....	1	1	0	aW. Fergusson, Esq. ....	1	1	0
aRev. T. H. Freer .....	1	1	0	aT. G. Dick, Esq. ....	0	10	0
M. Castello, Esq. ....	1	1	0	Rev. H. O. Sterland, collected by	2	7	6
aRev. R. Allen .....	1	1	0				
aR. Lane Poole, Esq. ....	0	10	6				
aF. W. Field, Esq. ....	1	1	0	LOCAL ASSOCIATIONS.			
aVen. Archdeacon Thorp .....	5	0	0				
aT. T. Ormerod, Esq. ....	1	1	0	BATH.			
aR. Mitchell, Esq. ....	1	1	0				
aRev. J. Macgregor .....	0	10	6	July 4.—By cash .....	2	2	0

## BRIGHTON.

Rev. C. E. Douglass, Local Treasurer and Secretary for Brighton, in account with the Palestine Exploration Fund.

<i>Receipts.</i>			<i>Expenditure.</i>		
Balance of Lecture, Dec. 1871...	5	14 6	Eylis, Printer .....	3	2 9
Collection at St. Stephen's Church, Sept. 15, 1872 .....	19	0 8	Collectors' Commission.....	0	5 0
Miss Cruso, 4, Montpellier-villas	0	5 0	Stationery, &c. ....	0	2 9
Miss Gilbertson, 33, Brunswick-square .....	0	10 0	Transmitted to Walter Besant, Esq., Sept. 17, 1872.....	21	19 8
	25	10 2		25	10 2

## CAMBRIDGE.

August 3.—aJohn Smith, Esq. 1 1 0

## CLIFTON.

July 9.—By cash .....

aW. Proctor Baker, Esq., Mayor of Bristol 2 2 0  
aRev. M. Brock ..... 0 10 0  
aRev. T. P. Cohen ... 0 10 6  
aRev. J. George ..... 0 10 6  
aMr. Holman ..... 0 5 0  
aRev. A. Kemble..... 1 1 0  
aRev. T. Percival ... 5 0 0

£9 19 0

By sale of views ... 0 11 6  
By sale of reports... 0 6 0  
0 17 6

£10 16 6

## EDINBURGH.

July 27.—By cash..... 80 0 0

## GLASGOW.

June 29.—aG. H. Muir, Esq.... 0 10 6  
August 19.—aJ. Slessor, Esq. ... 1 1 0  
Sept. 4.—aRev. A. A. Bonar ... 1 0 0  
Sept. 18.—aT. G. Dick, Esq.... 0 10 0

## GREENOCK.

Sept. 4.—  
aThomas Kirkwood, Esq. .... 0 10 6  
aJames Kirkwood, Esq. .... 0 10 6  
aWilliam Kirkwood, Esq. .... 0 10 6  
aDugald McDougall, Esq. .... 0 10 6

## HALIFAX.

July 6.—By cash .....

August 6.—aSir Titus Salt..... 2 2 0

## HERTFORD.

August 12.—Miss Lawrence ... 0 10 6

## LIVERPOOL.

The Committee will be very glad to receive offers from gentlemen in Liverpool to form an association or to act as honorary secretaries.

# LIST OF SUBSCRIPTIONS.

MALVERN.		£ s. d.		£ s. d.
Received .....	6 6 0		Mr. James Nott, Malvern ...	0 10 6
Expended .....	1 8 0		Rev. R. S. Perfect, Malvern- wells .....	1 1 0
	<u>£4 18 6</u>			
Donations—			PAISLEY.	
Rev. E. Acton Davies, Mal- vern-link .....		0 10 0	aRev. J. Martin .....	0 10 6
Miss Domville, Montreal- house, Malvern .....		0 3 0	PERTH.	
W. M. Harris, Esq., Malvern- link .....		1 1 0	Sept. 3.—aWilliam Ross, Esq.	1 0 0
W. B. Fisher, Esq., Bredon- house, Malvern .....		0 10 0	PLYMOUTH.	
Subscriptions—			Sept. 3.—	
Miss Beckwith, Sprink-bank, Malvern .....		0 5 0	aJ. W. Shelly, Esq. ....	1 0 0
Robert Gardner, Esq., The Myrtle, Malvern .....		1 0 0	aJohn Shelly, Esq. ....	1 1 0
Miss Mytton, The Virval, Malvern .....		0 5 0	SCARBOROUGH.	
Rev. W. W. Gedge, Malvern- wells .....		1 1 0	Sept. 3.—aP. N. Andrews, Esq.	0 10 6
			STIRLING.	
			June 24.—By cash .....	11 6 3

## WINDSOR.

August 7.—By cash ..... 12 16 6

Receipts.	£ s. d.	Expenditure.	£ s. d.
Mrs. Steele, Slough .....	4 5 0	Printing and stationery .....	0 13 0
Sir C. J. Palmer, Dorney, near Windsor .....	1 1 0	Postage stamps and carrying letters .....	1 10 0
J. B. Terry, Esq., Shrub's-hill, Sunningdale .....	2 2 0		<u>2 3 0</u>
E. H. Palmer, Esq., Canon-hill, Maidenhead (£5 a year for four years) .....	5 0 0	Balance in hand .....	12 16 6
Sir Daniel Gooch, Clewer.....	1 1 0		
J. J. Harris, Esq., Highfield, Englefield-green, Staines (don.)	5 0 0		
Rev. H. C. Hawtrey.....	0 10 6		
	<u>14 19 6</u>		<u>14 19 6</u>

## LOCAL ASSOCIATIONS.

### PUBLICATIONS OF THE SOCIETY.

- Nos. 1 to 8.—The earlier papers, which have mostly been embodied in subsequent publications, are now out of print, except Captain Warren's Notes on the Valley of the Jordan and Excavations at Ain es Sultan (Jericho).
- 9—15. Quarterly Statement. Vol. I. Nos. I. to VII.  
These Nos. are now all out of print, except 5, 6, and 7, which contain, among other matter—The History of the Moabite Stone—Captain Warren on Lebanon and the Temples of Coele-Syria—Captain Warren's Journey to East of Jordan—Letters from Mr. E. H. Palmer—Mr. Simpson on the Royal Quarries—Plan of the Haram Area, showing Excavations—&c., &c.
- 16—19. Quarterly Statement. New Series. Nos. I. to IV., 1871, containing—The Desert of the Tih and the Country of Moab, by Prof. E. H. Palmer, with large map and illustrations—Map of Moab—Captain Warren on the Plain of Philistia—Prof. Palmer on the Lebanon—M. Clermont Ganneau on certain New Discoveries—The Building of the Mosque of Omar, by Prof. E. H. Palmer—Captain Warren's Latitudes and Longitudes—Mr. Hyde Clarke on the Pre-Israelite Inhabitants of Palestine—&c., &c.
- Nos. I. and III. are out of print.
- 20—23. Quarterly Statement for 1872, containing—Papers from Capt. Stewart, Rev. C. F. Tyrwhitt Drake, Lieut. C. R. Conder, Captain Wilson, Captain Warren, Captain Burton, Mr. Glaisher, Mr. Grove, Rev. F. W. Holland, Mr. Dugald Campbell, Mr. Hyde Clarke, Dr. Alexander Buchan, Rev. H. E. Northey, Rev. J. E. Bailey, Mr. George Smith, and Rev. Dunbar Heath.

---

## LOCAL ASSOCIATIONS.

- ALLOA : *Hon. Sec.*—Rev. Alexander Bryson.
- ABERDEEN : *Hon. Sec.*—Rev. Prof. Milligan, D.D.
- ALNWICK : *Hon. Sec.*—Edward Allen, Esq.
- ARBROATH : *Hon. Sec.*—Mr. Anderson.
- ASHFORD : *Hon. Sec.*—F. A. Dewé, Esq.
- AYR : *Hon. Sec.*—Robert Murdoch, Esq.
- BASINGSTOKE : *Hon. Sec.*—Rev. W. Marriner.
- BATH : *Hon. Sec.*—Rev. T. P. Methuen.
- BEDFORD : *Hon. Sec.*—E. W. Ransom, Esq.
- BIRKENHEAD : *Hon. Secs.*—Rev. J. T. Kingsmill and T. Bell, Esq., St. Aidan's College.
- BIRMINGHAM : *Hon. Sec.*—Rev. Charles Evans.
- BLACKBURN : *Hon. Secs.*—Rev. Canon Birch and Rev. A. B. Grosart.
- BOTHWELL.—Through the "Bible Society" of the town.
- BRADFORD : *Hon. Sec.*—Rev. W. Dyson.
- BRIGHTON : *Hon. Sec.*—Rev. C. E. Douglass.
- BROADSTAIRS : *Hon. Sec.*—Rev. J. H. Carr.
- BURNLEY : *Hon. Sec.*—Rev. H. Stamer.
- BURY ST. EDMUNDS : *Hon. Sec.*—H. Prigg, Esq., Jun.
- BURY : *Hon. Treas.*—Rev. J. Hornby ; *Hon. Sec.*—Rev. W. Thorburn.
- CALLINGTON : *Hon. Sec.*—Rev. F. V. Thornton.

## LOCAL ASSOCIATIONS.

- CAMBRIDGE : *Hon. Sec.*—Rev. T. G. Bonney, Tutor of St. John's College.
- CANADA: Toronto.—Subscriptions are kindly received by the Hon. G. W. Allan.
- CARDIFF : *Hon. Sec.*—
- CHELMSFORD : *Hon. Sec.*—H. S. Coleman, Esq.
- CHELTENHAM : *Hon. Sec.*—Dr. E. Wilson.
- CHESTER : *Hon. Sec.*—The Very Rev. the Dean of Chester.
- CHIGWELL : *Hon. Sec.*—Rev. H. M. Robinson.
- CHIPPENHAM : *Hon. Sec.*—A. T. Keary, Esq.
- CLIFTON and BRISTOL : *Hon. Secs.*—Rev. C. H. Wallace and Rev. J. B. Goldberg.
- COUPAR ANGUS : *President*—Very Rev. Dean Torry.
- CROYDON : *Hon. Sec.*—Mr. Warren.
- DARLINGTON : *Hon. Sec.*—T. P. Pritchett, Esq.
- DEVIZES : *Hon. Sec.*—Rev. W. P. S. Bingham.
- DEVONPORT : *Hon. Sec.*—J. Venning, Esq.
- DORCHESTER : *Hon. Sec.*—Rev. Handley Moule.
- DOVER : *Hon. Sec.*—Mr. W. P. Mummery.
- DUNDEE : *Hon. Sec.*—R. Mackenzie, Esq.
- DURHAM : *Hon. Sec.*—Rev. J. Dodd.
- DUNFERMLINE : *Hon. Sec.*—Rev. And. Brydie.
- EASTBOURNE : *Hon. Sec.*—Rev. H. R. Whelpton.
- EDINBURGH : *Hon. Secs.*—Rev. W. Lindsay Alexander, D.D., and A. Johnston, Esq., F.R.G.S., 4, St. Andrew Square.
- EXETER : *Hon. Sec.*—Rev. Prebendary Acland, Broad Clyst.
- FALMOUTH, for the County of Cornwall : *Hon. Secs.*—A. Lloyd Fox and W. P. Dymond, Esq.
- FAVERSHAM : *Hon. Sec.*—Charles Smith, Esq.
- FORFAR : *Hon. Sec.*—T. Wilkie, Esq.
- FROME : *Hon. Sec.*—Rev. T. G. Rooke.
- FOLKESTONE : *Hon. Sec.*—
- GLASGOW : *Hon. Secs.*—Rev. W. Dickson, D.D., Rev. Donald Macleod, and A. B. M'Grigor, Esq.
- GLOUCESTER : *Hon. Secs.*—Rev. J. Bowman and F. Cooke, Esq.
- GREENOCK : *Hon. Sec.*—D. MacDonald, Esq.
- GUILDFORD : *Hon. Sec.*—Capt. Campbell, R.N.
- HALIFAX : *Hon. Sec.*—
- HALSTEAD : *Hon. Secs.*—Rev. S. J. Eales and Rev. J. W. Coombes.
- HASTINGS : *Hon. Sec.*—T. Dearing, Esq.
- HELENSBURG : *Hon. Sec.*—Rev. A. Murray McCallum.
- HERTFORD : *Hon. Sec.*—W. M. Armstrong, Esq.
- HEXHAM : *Hon. Sec.*—John Hope, Esq., jun.
- HUDDERSFIELD : *Hon. Sec.*—Henry Barker, Esq., Railway St., St. George's Sq.
- HULL : *Hon. Sec.*—Dr. Bell.
- HUNTINGDON : *Hon. Sec.*—Rev. Gerald Vesey.
- INVERNESS : *Hon. Sec.*—Capt. Bolland, R.F.
- IPSWICH : *Hon. Sec.*—Rev. J. R. Turnock.
- IRVINE : *Hon. Sec.*—Adam Sutherland, Esq.
- KIRKALDY : *Hon. Sec.*—John Barnett, Esq.
- LEEDS : *Hon. Sec.*—Edward Atkinson, Esq.
- LEITH : *Hon. Sec.*—A. Davies, Esq.
- LEWES : *Hon. Sec.*—Rev. R. Straffen.

# LOCAL ASSOCIATIONS.

- LISKEARD : *Hon. Treas.*—John Eliot, Esq. ; *Hon. Sec.*—Rev. Dr. Ritchie.  
MALVERN : *Hon. Sec.*—Rev. D. F. A. Grahame.  
MANCHESTER : *Hon. Sec.*—Rev. Canon Crane.  
MANSFIELD : *Hon. Sec.*—T. W. Clarke, Esq.  
MARCH : *Hon. Sec.*—Rev. J. Cater.  
MARGATE : *Hon. Sec.*—Rev. G. Collis.  
MIDDLESBOROUGH : *Hon. Sec.*—Rev. V. H. Moyle.  
MONTROSE : *Hon. Sec.*—Mr. Mackie.  
NEWARK : *Hon. Sec.*—Evelyn Falkner, Esq.  
NEWARK : Ladies' Committee. *Hon. Treas.*—Mrs. Tallents ; *Hon. Sec.*—Mrs. G. Hodgkinson.  
NEWBURY : *Hon. Sec. pro tem.*—Rev. J. L. Randal.  
NEWCASTLE : *Hon. Treasurer.*—Thomas Hodgkin, Esq. ; *Hon. Sec.*—W. Lyall, Esq.  
NEWPORT PAGNELL : *Hon. Sec.*—F. Tayler, Esq.  
OLNEY : *Hon. Sec.*—W. Hipwell, Esq.  
OXFORD : *Hon. Secs.*—Rev. Professor Rawlinson and Rev. Edwin Hatch.  
PAISLEY : *Hon. Sec.*—Rev. J. Dods.  
PERTH : *Hon. Sec.*—John W. Jameson, Esq.  
PLYMOUTH : *Hon. Secs.*—J. B. Rowe, Esq., and J. Shelly, Esq.  
PORTSMOUTH : *Hon. Sec.*—  
REIGATE and REDHILL : *Hon. Sec.*—W. Wilson Saunders, Esq.  
RICHMOND, SURREY : *Hon. Sec.*—R. R. Alexander, Esq.  
SCARBOROUGH : *Hon. Sec.*—Rev. J. Bedford.  
SEVENOAKS : *Hon. Sec.*—Graham Jackson, Esq.  
SOUTHPORT : *Hon. Sec.*—George Lee, Esq.  
SHERBORNE : *Hon. Sec.*—J. Farmer, Esq.  
SOWERBY : *Hon. Sec.*—Rev. A. L. W. Bean.  
ST. ALBANS : *Hon. Sec.*—Rev. W. J. Lawrance.  
ST. ANDREW'S : *Hon. Secs.*—Dr. Lees and Dr. Mitchell.  
ST. GERMANS : *Hon. Sec.*—R. Kerswill, Esq.  
STOCKTON : *Hon. Sec.*—Joseph Laidler, Esq., M.D.  
STIRLING : *Hon. Sec.*—Rev. W. Taylor.  
STROUD : *Hon. Sec.*—T. S. Osborne, Esq.  
TAUNTON : *Hon. Sec.*—R. J. Shepherd, Esq.  
TAVISTOCK : *Hon. Sec.*—Mr. Frederick Clarke.  
TIVERTON : *Hon. Sec.*—J. Allen, Esq.  
TUNBRIDGE WELLS : *Hon. Sec.*—Capt. Palmer, R.E.  
UXBRIDGE : *Hon. Sec.*—J. Hunt, Esq., F.R.G.S.  
WARMINSTER : *Hon. Sec.*—W. Frank Morgan, Esq.  
WELLS : *Hon. Sec.*—W. I. Welsh, Esq.  
WESTON-SUPER-MARE : *Hon. Secs.*—Capt. T. Townsend, R.E., and J. Titley, Esq.  
WHITBY : *Hon. Sec.*—E. W. Chapman, Esq.  
WHITEHAVEN : *Hon. Sec.*—  
WILLESDEN : *Hon. Sec.*—Rev. J. Crane Wharton.  
WINCHESTER : *Hon. Sec.*—Miss Zornlin.  
WINDSOR : *Hon. Sec.*—Rev. H. Courtenay Hawtrey.  
WORCESTER : *Hon. Sec.*—Rev. Francis J. Eld.  
YARMOUTH : *Hon. Sec.*—Rev. H. R. Nevill.



## PHOTOGRAPHS.

The photographs issued by the Fund can be purchased of Mr. Edward Stanford, 6 and 7, Charing Cross, at the following rates:—

To Non-Subscribers ... .. 1s. 6d. each.

To Annual Subscribers of half-a-guinea ... 1s. 0d. each.

Catalogues and Lists can be obtained at the Agents' or the Society's Offices.

Agents are also established in the different towns, and the Secretary will be glad to hear from any person desirous of undertaking the agency.

---

## THE "SEAL OF HAGGAI."

Casts of this small seal, which is of very great antiquity, have been taken. They can be procured at 2s. 6d. each.

---

## THE MOABITE STONE.

Facsimile casts of the small fragments have been taken. They can be procured at cost price.

Photographs (to be obtained of Mr. Edward Stanford)—

1. One-third size of Captain Warren's tracings (mounted)... £0 3 6
  2. Full size of the squeezes themselves, in four photographs... 2 10 0
- 

## THE HAMATH INSCRIPTIONS.

Photographs of the squeezes have been taken, and can now be procured.

---

## ERRATA IN PREVIOUS LIST.

Glasgow List.—A. Kirkwood, Esq., for £4 read £2.

In Subscription List.—For R. Somerville, Esq., read R. Somerville, Esq., Junr. ; for J. F. l'Anson, read T. F. l'Anson ; John Moody read John Mordy ; C. T. Valentine read C. J. Valentine ; for H. R. Reynolds, Esq., read Rev. Prof. Reynolds, D.D.

In the April *Quarterly*, for J. F. Cobb, Esq., read Rev. J. F. Cobb.

---



MAP  
to illustrate  
LIEUT CONDOR'S LETTERS



# PALESTINE EXPLORATION FUND.

---

Patron—THE QUEEN.

---

## *Quarterly Statement*

FOR 1873.



LONDON:

PUBLISHED AT THE SOCIETY'S OFFICE, 9, PALL MALL EAST,  
AND BY  
RICHARD BENTLEY & SON, 8, NEW BURLINGTON STREET.

LONDON:  
R. K. BURT AND CO., PRINTERS,  
WINE OFFICE COURT, CITY.



# INDEX.

	PAGE		PAGE
Abud .....	143	General Meeting .....	119
Abu Amir .....	12, 31	Geology .....	7, 26, 50, 85, 97
Ain el Siah .....	65	Geological Notes, by Mr. C. H. Green .....	161
Aleppo, Inscriptions at .....	72	German Colony at Haifa .....	62
American Association, The .....	111, 162	Gerizim .....	67
Aqueduct at Saffûriyeh .....	55	Gezer, Discovery of Royal Canaanite City, by M. Clermont-Ganneau .....	73
Aqueduct at Caesarea .....	109		
Arab Clans .....	105		
Athlit .....	87, 101		
		Haifa .....	43, 51
Baalbek, State of the Ruins of ...	158	„ German Colony at .....	62
Beni Keelayb, The .....	58	„ El Atikah .....	64
Bethulia .....	4	Hamath, The Inscriptions of ...	35
Biblical Query, by H. B. ....	80	„ Mr. Dunbar Heath on ...	62
Burj Fara'a .....	49	„ Mr. Drake on .....	62
		„ Mr. Wright on .....	74
Caesarea .....	87, 105	Hand-print on the Wall ....	16
Carmel—Crusading Work on ....	85		
„ Flora of .....	53	Inscription at Belah .....	87
„ Scenery of .....	54	„ Umm el Zaynat ...	87
Cave of Magbaret el Mat-hûmeh...	57	Iksal .....	23
Cave of Yafa .....	57	Identifications Proposed : —	
Chaplin, Letters from Dr. ....	155	<i>Jethlah</i> = Shilta .....	101
Climate .....	60, 65	<i>Helkath Hazzarim</i> = Wady el Askar .....	101
Costumes, Modern .....	27	<i>Asher</i> = Asirah .....	101
Comparative Chronology of Palestine, Assyria, and Egypt, by Mr. F. R. Conder .....	31	<i>Aner</i> = 'Anin .....	101
		<i>Bileam</i> = Ibleam = Bel'amieh .....	101
Dayr Kalaah .....	145	<i>Rabbith</i> = Arrabeh, <i>Amad</i> = Umm el Amid .....	101
Dayr Samaan .....	147		
Dayr Arrabeh .....	147	Joshua's Tomb .....	144
Dayr Asruhr .....	139	Jebel el Siah .....	55
Dayr Allah .....	140	Jacob's Well .....	71
Difficulties with Natives .....	61	Joseph's Tomb .....	71
Dome of the Rock .....	155	Jeba .....	83
		Jenin .....	3
El Midyeh .....	87	Jerusalem .....	15
Ecbatana .....	87	„ Kalaat Jalud .....	17
El Fuleh .....	49	„ Haram Area .....	17
El Jireh, Ruin of .....	23, 49	„ Dome of the Rock ...	17, 155
Ebal and Gerizim, Major Wilson on .....	67	„ Ruins East of the Holy Sepulchre .....	18
Esdraelon, Plain of .....	3	„ Muristan .....	19
„ „ Battles on the .....	5	„ Scopus .....	20
„ „ Geology of .....	7	„ Helena's Monument ...	21
„ „ Survey of .....	8	„ Psephinus .....	21
Flora of Carmel .....	53		

	PAGE		PAGE
Jerusalem Newly-discovered Roman Tomb .....	22	Ruins, General Character of .....	45
„ Mr. Schick's Latest Work in.....	36, 72	Samaritan Stone at Gaza .....	157
„ Dr. Chaplin on the Climate of .....	39	Sand Dunes .....	65
„ Rock Levels .....	151	Sanur .....	4
Khashm, The.....	110	Saracenic Khan .....	88
Kubbet es Sakhras .....	90	Sarafend .....	84
Kubbet el Khidr .....	91	Seffuriyeh .....	24
Khirbet Fakhakhir .....	141	Seilûn (Shiloh), Plan and Description of.....	37
Kefr Lam .....	84	Shaykh Abrayk.....	47
Khirbet Jafa .....	48	Shaykh Iskander .....	11
„ Shih .....	84	Shaykh Taim (Oak at Tibneh) ...	144
„ Umm el Shukuf.....	84	Shapira Collection, The .....	13, 79, 88
„ El Shellaleh .....	84	Survey, The Interrupted French... ..	113
„ Melhah .....	84	Survey, General Progress of—See Reports of Lieutenant Conder .....	3, 43, 83, 135
„ Semmakah .....	87, 96	Tank No. 29 .....	91
„ Baydus .....	97	Tantura .....	84, 99
„ Khazneh .....	23	Tell Kaymun, Crusaders' Fort in .....	49, 60
Kefr Minda .....	25	„ El Semak .....	64
Kasr el Zir, Traditions of.....	58	„ Khaiber .....	4
Kalensawyeh .....	87	„ El Sûbât .....	46
Lejjun.....	12	„ Mutasellim... ..	46
Magharet el Mat-hûmeh, Cave of... ..	57	Tells .....	60
M'alul .....	49, 53	Tells on Esdraelon .....	46
Matamir .....	57	Tibneh .....	143
Meteorology .....	150	Tradition on Tombs of the Kings .....	48
Merj el Ghurruk .....	4	Tombs, Classes of.....	23, 46, 58, 84
Miamas .....	87, 110	Thul el Serjilâni, Tradition of ...	65
Mosque el Aksa.....	90	Tûlûl el Jah'ash .....	46
Mukhalid .....	87	Turkomans, The .....	105
Nazareth .....	22	Tyrwhitt Drake, Letters and Reports of Mr. C. F. ....	28, 55, 99
Natural History .....	9, 27, 29, 86	Unm el Zaynat.....	87
Neby Yahyah .....	148	Umm el Fahm, Camp at .....	10, 28
Nomenclature .....	148	Umm el Faruj .....	65
Notes :—		Vineyard Towers .....	55
1. The Lord's Tomb.....	113	Wady Arah .....	11, 29
2. The Hamath Inscriptions .....	115	Wely Iskander .....	30
3. The Middle City .....	116	Water-courses and Channels .....	46
4. The Samaritan Stone .....	118	Water Supply .....	149
Passage from the Pools under the Convent of the Sisters of Zion... ..	91	Yafa (Japhia), Cave at.....	57
Rock Levels at Jerusalem .....	151		
Reading of the Law, Scene of the .....	69		

THE  
PALESTINE EXPLORATION FUND.

PREFACE.

IN beginning a new volume of our *Quarterly Statement*, we are anxious to ask our Subscribers to bear in mind, that we are still far from being assured as to the stability of our position. We have purposely asked for a very small sum annually, only £5,000 for the next five years or so. That amount will enable us to carry out all our objects. We require £800 a year for home expenses, of which about £400 is wanted for management, the other half being spent in publishing, illustrating, and distributing our Reports. In other words, we can do all our work on eight per cent. of the income we ask. But it must be remembered that we have never received anything like this income.

We have two main lines of work, the survey of Palestine and the examination of Jerusalem. The former has been conducted during the last year with as much vigour as was possible. More than a thousand square miles have been plotted, and when we can send out two more men to help, it will go on with double the expedition. It has been decided to open a special fund for Jerusalem purposes, to which subscriptions are invited. A donation of £50 for this purpose has been recently given by Mr. Tyssen Amhurst, and another of the same amount for the Survey.

If any additional motive were wanted to urge on the work, it would be found in the despatch of the American Expedition. The two great branches of the English-speaking race are now working side by side. The leader of the American Expedition is an officer

of the United States Engineer Corps, Lieutenant Steever. He is accompanied by Professor Paine, as archæologist, and by Mr. Vandyke, jun., of Beyrout. At Beyrout itself are the head-quarters of the Executive Committee of the American Association, composed of the United States Consul-General, the Rev. Dr. Thompson, and the Rev. Dr. Stewart Dodge. As has been stated before, their work will be east of the Jordan over a district comparatively unexplored, and where, doubtless, there will be made discoveries of the deepest interest. There may even be more Moabite stones. We do not *expect*, but we *hope*.

The letters and reports of Mr. Conder and Mr. Drake require no explanation. They are, and will henceforth be, accompanied by a map to show the progress made and the position of the Surveyors. With regard to the tracings already sent home, they are in the office of the Fund, and can be seen by any visitor. They cannot be published until a complete "sheet" has been received. This may not be for more than a year, as the work is spread over a great many sheets, but does not yet cover one single one. We have been kindly promised another meteorological report from Mr. Glaisher for our April *Quarterly*. This will also contain, besides the usual reports, a paper on Mount Gerizim by Captain Wilson. Other papers of interest will appear in the course of the year.

We commend our recently published little book, "Our Work in Palestine," to our Subscribers. It is written with a view to explaining not only what the work has been, but the reasons for it and its aims. We are happy to say that so far its success has been undoubted. Within three weeks after its first appearance we were enabled to order the fourth thousand to be printed, an edition having been simultaneously published by Messrs. Scribner, Welford, and Co., of New York. A very low price has been put upon the book, in order to bring it within reach of all. Considerable corrections have been made in the fourth thousand.

# THE SURVEY OF PALESTINE.

---

LIEUT. CLAUDE R. CONDER'S REPORTS.

## VII.

### THE PLAIN OF ESDRAELON.

JENIN CAMP, 21st Sept., 1872.

A critical epoch in the Survey of Palestine has just terminated in a most satisfactory manner, in the connection of the triangulation extended from the first base line at Jaffa with the second base line just measured on the Plain of Esdraelon.

According to our calculation, which is not of course so minute as that to be made in England, there is only a difference of about .03 per cent. of its length of four and a half miles between the base as *calculated* from the triangulation, and the base as *measured* on the Plain. This may be considered as extraordinarily accurate when the difficulties encountered are considered, for the triangulation has now been carried through a strip of country averaging some ten to twelve miles in width and for a distance of sixty-five English miles, in addition to which it must be remembered that cairns have occasionally been destroyed by the natives, the observations being thus rendered less reliable, and that the flickering of the mirage during the day in summer has made it difficult to see an object distinctly at a distance of eight or nine miles in the hills and even of three or four on the plains. The extremely difficult nature of part of the country has of course delayed the progress, but not interfered with the accuracy, of the work.

The total extent of country at present completed is 750 square miles, and upwards of 130 square miles will be added in another week, as the triangulation from the present camp is finished and only the detail remains to be filled in. This is a more rapid progress than was expected, and our arrival at Jenin was a fortnight earlier than had been calculated.

The new base line lies within four degrees of north and south, and is approximately four and a half miles in length over the flattest part of the great plain. Its ends are marked, in a most durable fashion, by cairns of stone set in a sort of mortar of fresh-slaked lime. The southern end has a roughly circular platform of large blocks and of some 3ft. in height and 9ft. diameter, filled in with smaller stones, and the top levelled and covered with lime to form a firm basis for the theodolite, between the legs of which a small conical cairn was placed.



At the northern end, in the middle of a ploughed field of loose heavy volcanic soil, it was more difficult to find materials close at hand. A large mound, some 8ft. high, was therefore made of earth round a fixed centre, and faced with stone well covered with lime. Before observing from this point, which was the last to be used, the mound was partially levelled, and a platform so made round the centre. The theodolite was then placed over the centre, and the mound will be rebuilt as before.

The base was measured from north to south and from south to north, and was further checked by observations from its ends and from a point near its centre. The triangulation will be extended from it northwards, and a good line, some fifteen miles in length, is obtained at once nearly at right angles to the centre of the base.

Such is the present satisfactory state of the Survey, which is now only in want of the additional men asked for from England to reach the required rate of progress.

The amount of archæological discovery between this camp and Nablus has been very small, the few ruins, such as the church and columns at Samaria, being already known, and excavation would not bring to light anything of value.

Near Sanur, however (the ancient Bethulia of the book of Judith, as some suppose), a ruin of some interest was found, and a sketch is forwarded. An isolated hill or tell called Tell Khaiber rises on the south-east of the Merj el Ghurruk, or "drowned meadow," a large marsh formed by the water from the surrounding ravines, and without any outlet. In winter it has some 4ft. of water on the average, but is dry in summer. Sanur is situate on the edge.

On this "tell" are the ruins of a small fort and of a considerable town, but the latter are quite indistinguishable, and only in parts indicated by the colour of the soil.

The fort is roughly some 50ft. square, and two or three courses of masonry, about four feet thick, consisting of ashlar of tolerable size, and set in good mortar, remain. On some few stones there is the appearance of a marginal draft, and over the entrance, which was on the south side, was a flat lintel. The proportions of the stones are not, however, so unequal, in comparison of their length and height, as in the megalithic work of the Haram.

There are further traces around the fort of an external wall with a postern, and of several buildings of moderate size but almost undistinguishable form. Two cisterns, lined with very hard cement, one of which is of considerable size, also appear farther down the hill, and the grey soil, which indicates the former existence of buildings, appears on every side of the "tell."

Local tradition makes this the palace of a Jewish king whose daughter had her summer residence in the marsh. Perhaps a clever theorist may connect this account with the history of Judith, Bethulia being so close to Tell Khaiber.

The great plain, on the edge of which we are now encamped, is of great interest from a historical and from a geological point of view.

Historically it has been called the "battlefield of Palestine," and here, be it remembered, the "battle of Megiddo" (it is supposed) will close the list of contests in the Holy Land.

Whatever may be said of the future, the history of the past does not, however, bear out this assertion. The great battles of Joshua were fought far to the south. The victories of David were on or near to the plains of Philistia. The invasions of the Syrians were directed against the country round Samaria, and the battle of Hattin, which decided the fate of Christian supremacy in Palestine, was fought out farther north.

Only five contests are chronicled as occurring on the Plain of Esdraelon: the defeat of Sisera, the victory of Gideon over the Midianites, and the overthrow of Saul on Gilboa, and of Josiah at Megiddo in Bible history; lastly, in more modern times, Napoleon's so-called battle of Mount Tabor.

A brief glance at these battles confirms, however, the opinion that the plain is not, as its appearance on the map would lead one to suppose, specially fitted for the deployment of large numbers of troops or for the successful use of cavalry. The scene of each battle was near the same site, and for this there must, of course, have been a reason. The method and tactics employed by the Jews resembled those of the old mediæval wars of position, as is abundantly manifested in the accounts in the Bible. Each army encamped over against the enemy on a hill or on rising ground with a valley between, and thus the attacking force, unless its leader had advanced views on the use of stratagem and the secret of turning a flank, was inevitably at a disadvantage, and for the same reason a broad plain not offering such advantages was never chosen as the site of a battle.

In the first instance the camp of Barak was on Tabor, and Sisera advanced against him from the Kishon and the Maritime Plain. The counter attack against the heavy chariots labouring through the volcanic mud, which, at a time when the Kishon was full of water from the storm, must have covered the plain, secured for the discomfited Canaanites a defeat more disastrous than would have been expected in an open country, such as that on the north-west of the Plain. In the subsequent contest between Gideon and the Midianites, this open country seems to have been avoided; the camp of the former was on the high ground near Jesreel, whilst the invading bands, like the modern Bedouins, had crossed the Jordan, and advancing up the broad valley (W. Jalud) to the foot of the hill Moreh (the modern Jebel ed Dâhy, or, as it is often called, Little Hermon) had camped securely in the low ground and spread for plunder of the harvest and of all the possessions of the Israelites "as grasshoppers for multitude." The attack from the high ground on this occasion, accompanied by a strata-

gem, was again successful, and the pursuit was towards the east and across the Jordan.

The third battle was, however, by far the most important of the three. The Philistines, under Achish, king of Gath, in Philistia, are here found in the northern plains, and it is possible that the name Wady Jalud, or the valley of Goliath, may still be a mark of their wide dispersion in Palestine. Their camp was at Shunem (the modern Sulem), once more on the slope of the Hill of Moreh, and Saul, as did Gideon, chose the neighbourhood of Jesreel for his head-quarters, and his line of retreat along the high ground of the chain of Mount Gilboa, and to the hills south of the plain. Considering the relative position of the enemy, we see that Saul's expedition to the cavern at Endor, situate north of the Philistine camp, must have entailed a circuitous and lengthy expedition in order to turn their flank on the west and gain the opposite side of the hill, whilst the peril of thus placing their whole army between himself and his camp was also very great. The following day brought his entire defeat; and when we observe that the flight lay along the hills of Gilboa, it seems evident that the main attack must have been not from the north, where the valley is deepest, but on the west, the left flank of Saul's army, where the plain rises into the eminence on which Jesreel (the modern Zerin) stands.

The last battle is of more modern times, for of the defeat of Josiah in the valley of Megiddo there is no reason to speak here. Kleber, with a corps of only 1,500 men, was brought to bay at Fuleh, a little village on the west slope of Jebel ed Dâhy, by the whole Syrian army of 25,000. From sunrise to mid-day they held their position against these overwhelming odds, but a single shot from Napoleon's relieving force of 600 men caused a panic and a flight, in which many Syrians were drowned in the Kishon, then inundating part of the plain.

In each of these accounts we recognise the same peculiarity. In the three later the site chosen was almost the same, and the so-called battle-field of Palestine seems even in those battles fought in its immediate vicinity to have been avoided, the camps being posted on the hill-sides to the east or north-east. The reason is evident; for laying aside the fact that the Jews were never a cavalry nation, the plain itself, covered with a crumbling soil, over which native horses advance with difficulty in summer, and which in winter presents a series of impassable marshes, could never have been considered a good field for the use of this arm.

The geological view of the subject is intimately connected with the historical, and, indeed, in the study of a new country there is no science so generally useful as geology. Not only does the character of the district, its vegetation, its fauna, its scenery, its cultivation, and even the style of towns and villages, differ with slight geological changes, but its history, its civilisation, and more especially its military history, depend to a very great extent on its geology. Thus when we

observe the camps at Shunem or at Jesreel, we find them to have been placed on the firm ground and gentle slopes given where the limestone is on the surface, whilst the flight of the defeated Sisera is across the volcanic mud which covers the plain.

The formation of this great plain, as well as of the smaller ones in its vicinity, is due partly to volcanic action and partly to that of denudation.

A thick bedded white limestone, containing large discs of flint, and gradually merging into the marl of Nablus above, and into a compacter and more thinly bedded soft limestone beneath, originally covered the country from Samaria to Nazareth. Though hard externally, when exposed to the air, this stone is internally as soft as the softest "kakouli." But beneath lay the truly hard dolomitic limestone, such as previously described at Neby Belan.

The present character was given to the country first by a number of eruptions of basalt which occurred in at least three distinct outbursts. One formed the cone of Jebel ed Dâhy, the so-called Little Hermon; a second appears as a distinct upheaval of the strata, from beneath which the basalt has flowed down the side of Jebel Abu Madawar (part of the Gilboa range on the south-east of the plain). The third, and by far the most extensive, is on the west, where on Jebel Sheikh Iskander, one of the highest hills of the neighbourhood, eruptive basalt and stratified volcanic mud are found near the summit on the east, and two isolated cones of basalt on the west, in continuation of the ridge. The Neocomian and other strata are here found to be greatly contorted, but the general dip is upwards from the south-west of the outburst, showing the contortion to be due to this eruption.

The character of the basalt differs considerably. At Jebel ed Dâhy it is black, hard, and compact, with a large amount of iron. At Zerín it is of similar character, but covered so thickly with white lichen as to be hardly distinguishable at first from limestone. On Mount Gilboa, where a regular dyke can be traced below the main outburst, it is of looser consistency, in some specimens more resembling volcanic scoriæ, with less iron and large crystals or distinct agglomerations of augite. On Jebel Sheikh Iskander, again, it is soft and crumbling, in many parts reduced to *débris*, and here volcanic mud is also found.

On observing the lowest strata naturally nearest to the basalt, they are found similar to the hard dolomitic beds of Neby Belan, which also are visible at the bottom of the deepest wadys west of Jeba and north of Mount Ebal. They are the most contorted, and have the greatest dip of all the beds, from which it may be concluded that even before this upheaval they were not conformable with the upper beds. They are hard, compact, worn into caverns by water or gaseous action, and extremely crystalline. From these characteristics, and from their proximity to the basalt, it seems undoubted that they are metamorphic in character (a fact not, as far as I am aware, before noticed), and hence we may conclude that throughout Palestine, wherever they crop out,



the basalt, or some species of Trappean rock, is not far from the surface. The extent of volcanic action must therefore be greater than is generally supposed in Palestine, a theory maintained by Mr. Drake, whose discovery of an outburst as far south as Jerusalem is most valuable in its support.

The action of denudation was also concerned in the formation of the great plain. The strata being thus broken and tilted in every direction, the harder formations were raised on each side, and the softer being worn gradually away between them, were overlaid with a soil consisting of the *débris* of the basalt. Hence we have at last the present surface, a broad plain with rich soil, and surrounded with limestone and basaltic hills, presenting sudden and precipitous cliffs, as above Zerin and below Nazareth, while on the tops of the hills only the original soft chalky limestone remains on the east and on the west alike.

With such variety of geological formation some variety in scenery might also be expected, and is found to exist. The soft white limestone gives low hills, on which the olives flourish, and caper and other shrubs abound. Near to the springs, which are not, however, numerous, gardens with figs and pomegranates also are found. The villages are larger and more wealthy than in the hill-country of Judæa, and perched on the hill-side, or on isolated hillocks in the plains. Numerous gay butterflies of European and African species, including the copper (four or five species, some similar to the English), and one or two of the genus *vænessa*, but more of smaller size, belong to this scenery; the cicada and mole cricket evidently alternate in the olives by day and by night; the species of lizards are large and powerful, and dark grey, as a rule, in colour, and the chameleon is not seldom found. Wild animals are few in these cultivated districts, and the birds principally of the smaller genera, though vultures, eagles, harriers, and hawks are commonly seen.

The scenery of the great plain itself is, however, of a different type. The long flat expanse is divided into patches, which, viewed from the summit of Jebel Dâhy, seem with the roads to radiate from the villages on the low knolls of limestone rising out of it. These consist of fields of Indian corn, of simsim or sesame, of corn, and occasionally of cotton. Fallow land in dark brown strips intervenes. Near Jenin and Sileh (villages on the border) a few palms give a truly oriental character to the scenery, springing round the minaret of the mosque, and hedges of prickly pear surround many of the villages. The animal life also differs slightly in character. Huge locusts, and species of *truscalis* (the bald locust of Scripture), are occasionally seen; and of the smaller species, with red, white, yellow, blue, and green wings, swarms may be disturbed at every step, reminding one of the appropriateness of the simile, "like grasshoppers for multitude." Several species of the praying mantis, with the abdomen curled curiously upwards, are also common. The lizards are of small species, and agree in colour with the brown soil. The birds most common are the swifts and swallows, with the



ever-present birds of prey. The howling of jackals, the groups of gazelles, and the wild boar coming to the water at sunset, are all more ordinary sights and sounds than in the hills.

The hard crystalline rock of the lowest formation gives yet another type of scenery, barren and desolate as can be imagined; the hills are tame in outline, with deep narrow ravines intersecting them. Nothing but a few thorny shrubs and dry grass seems to grow on them, and the attempts at cultivation, unlike the laboriously intricate terraces of the softer soil, are few and meagre. Here on the tops of the hills the magnificent genus *Papilio* is found alone; other insects are more rare; and wild animals, including the jackal and the gazelle, abound. Coveys of partridges (*Caccabis saxatilis*) are numerous, but very wild.

This scenery is again modified, where the basaltic *débris* forms a soil, as at Sheikh Iskander. Here the hill-sides are densely covered with shrubs and trees, which would be large were it not for the destructive habits of the natives, who for the sake of the firewood burn or cut out half of the trunk and three-quarters of the branches. The principal species are the *Quercus cocifera* and another oak, the arbutus in shrubs, and the carouba. In many parts the bushes are almost impassable and of considerable height, presenting a refreshing contrast to the dull parched grey of the olives, and of the limestone in the more open country. It is in country like this that the leopard, the cheetah, the wild boar, and other game are found on the range of Carmel; and the ever-present birds of prey here find a more numerous quarry.

A good deal that is new might yet be said with regard to modern Palestine, considered from a pictorial point of view. Were it possible to bring a man of good artistic taste into the country, ignorant of its past associations, and of all that has been written on the subject, there can be little doubt that his descriptions would be new, and very astonishing to many; probably quite as much so to the class of writers who can see nothing to admire in Palestine, as to the author who describes the "ice-clad peaks of Hermon."

Grandeur of form we may look for in vain, and except in such scenes as that of the great plain as seen from above Nazareth, the extensive views are rarely striking. Barren hills, dry gullies, tame and commonplace outlines abound; but the charm of a vivid oriental colouring still remains to please an artist's eye. The rich hues at sunset, the peculiar tints of some of the limestone hills—such as Mount Ebal—which reflect the blue of the sky, the occasional afternoon effects with long-drawn shadows, and of brilliant contrasts of light and dark on a cloudy day, would, if caught and treasured, lead any one inspecting a series of such sketches (from which the *commonplace*, as in other countries, had been banished) to believe in Palestine as a very picturesque country.

Nor must the appearance of the inhabitants—their dark skins,

bright eyes, white teeth, and wonderful taste in the combination of the brightest colours, be forgotten. Nothing more picturesque than a road, the women in their red veils and long-pointed sleeves carrying water; the dark camel-drivers, in black head-dresses, and striped brown-and-white abbas, riding on diminutive donkeys before the train of clumsy, swinging, dull-coloured camels; the rich sheikh, in a purple jacket, scarlet boots, a thin white cloak, and a yellow head-dress, his grey mare with a scarlet saddle, and long brown tassels at its shoulders, alternating with the herds of black goats and diminutive red oxen, could be desired.

In Jerusalem itself this colouring is not less marked. The costumes are far more varied, and the colours gayer, whilst the effects in the surrounding country are equally brilliant at times. The pink light on the sides of the Kedron valley, the rich ochre colour of the Haram walls, the dark grey of the city fortifications, are all points on which an artist would look with pleasure. But above all, the interior of parts of the Haram, its dusty soil covered in spring with flowers, and its dark cypresses round its richly-coloured mosque, are especially impressive. Nor is the gloom of the interior, through which the elaborate mosaic arabesques, the gilded inscriptions, and capitals, and painted woodwork, and glorious glass windows gradually come out as the eye grows accustomed to the sudden change from the glare without, less fine; while the gaily-dressed processions, the sombre colouring of the negro inhabitants of the shrine, the flights of pigeons, here finding a sanctuary, lend the finishing touches to a picture which really recalls the idealistic scenes of the "Arabian Nights Tales."

---

## VIII.

### PROGRESS OF THE SURVEY.

R. E. CAMP, UMM EL FAHM, *Oct. 10th, 1872.*

From the camp of Umm el Fahm, which will to-morrow be broken up, the first thousand miles of survey have been completed in close upon a year of unintermittent work, including the satisfactory measurement of two base lines, the completion of a long narrow strip of triangulation, which, in spite of the awkwardness of its shape, necessitated by other than strictly survey considerations, has been kept correctly in place as regards its longitude, and finally the completion of the detail and of a great part of the hill shading.

My first report on this subject was dated the 18th of July, when 560 square miles were completed. Thus in the last three months 440 square miles, or 44 of the whole amount, were executed. Thus, though the rate had till July been gradually increased, it has been still more so since that time, a fact due in great part to the increased facility of travelling in the country last traversed, which has allowed of the use of larger triangles, and of the more rapid execution of the detail. Or

the correctness of the work my seventh report gave satisfactory proofs; and of its execution the Subscribers to the Fund will be able to judge by the tracing sent home in July, which will, no doubt, be soon published and circulated.

The country surrounding our present camp is unusually picturesque, and but little known to travellers, as it is out of the ordinary direct route.

Immediately in front of us, on the south, is the volcanic summit of Sheikh Iskander, a point conspicuous on all sides from a great distance, forming the boundary of the view northward from the Jeba range of hills, and rising above all the surrounding country, as viewed from any part of the plain.

As before noticed, the hard dolomitic limestone is here tilted up in every direction towards the summit of the hill, and the upper strata are worn away from over it by denudation. The slopes are covered with the thick shrubs and underwood which extend southward to the small plain east of that of Esdraelon, known as the Merj Arrabeh, and the same kind of country extends westward, where, however, oaks of considerable size, with a species of hawthorn and an occasional terebinth, make the scenery still more varied in character.

The great Wady Arah, which runs westward, just north of Umm el Fahm, makes a sudden division between this district and a second extending along the west side of the plain to Carmel, apparently a dry desert, though in reality it is all arable land, watered, as is the Sheikh Iskander district, by numerous springs and deep wells. The geological formation is the hard chalk containing flint bands, which has been before noticed, and beneath, as visible on the sides of the deepest wadies, is the soft white marl or chalk first noticed near Nablus. Thus the succession of the strata, as observed here, is identical with that noted at Jifna by Captain Wilson, and except in places where the last named formation seems to thin out, these three successive kinds of limestone are continually recurring.

The appearance of the country to the north of the camp is gradually modified westward, where a white dusty soil is dotted over with clumps of oak (ballut) spreading over the gently undulating slopes, and presenting what would be park-like scenery, were it not for the absence of grass, which in summer is replaced by corn, the whole ground being arable. Two or three beds of winter streams are crowded with shrubs, and beneath one of the volcanic "tells" or mounds of Sheikh Iskander flows even at this, the driest season of the year, a stream, though but of inconsiderable amount. Round its bed brambles and young willow plants flourish, and the course of a second and larger stream near Lejjun is marked by the bushes of epilobium and large plants of a kind of mint, as well as fennel brambles and smaller plants.

The volcanic "tells" require particular notice, as their discovery shows the centre of irruption at Sheikh Iskander to have been even larger than at first supposed. Farther north, at Lejjun and in its

vicinity, these outbreaks again occur, as well as near Endor, on the north side of Little Hermon, thus carrying out more completely the theory of the formation of the great plain, as noted in Report No. 7. On Sheikh Iskander there are two of importance, one near the main outburst of basalt on the hill, in which a sort of volcanic mud has lifted the top strata of the limestone and poured out at the side of the mound so formed, and a second where a sharp cone of the same substance, in layers of various colour, is capped with limestone. The character of the mud in the first, when minutely examined, resembles a disintegrated basalt; in the second, which is to the west, near the Ain Sheryyeh, blocks of hard, dark, compact, ferruginous basalt are embedded in some parts, and fragments of limestone in others; whilst beneath, separated by a thin band of limestone, the basalt appears as a rock in the sides of a small precipitous gully, to a depth of twenty to thirty feet. Here, as a native states, a Frenchman from Damascus pitched his tent, and extracted copper from the mud. There is, however, no appearance of either a lode or of nodules, as far as careful observation could show.

The "tell" near Lejjun (the site of the famous Megiddo) is still more curious. It consists of hard basalt, and though of considerable height, it does not appear in any way to have affected the limestone strata, which are nearly horizontal, the formation being the hard chalk, which is not changed or metamorphosed in any degree.

Several of the views in this country are more picturesque than any we have yet come across in Palestine. Thus, in early morning, from the top of the hill the eye wanders over the broken outline of the hills south of the great plain, backed by the long veil of transjordanic mountains, and over the long extent of the plain itself: a scene which, with the dim shadowy effect of sloping light, must be allowed to be beautiful by even the least prejudiced in favour of Palestine scenery.

Looking again northward, a similar scene, taking in the volcanic peaks of the Hauran and the huge blunt-pointed Hermon in dim distance, with the Nazareth range, the shapeless outline of Tabor, and the Little Hermon's conical summit, the great plain again stretching below, all towards the foreground, presents a striking distant effect as viewed in evening light and shadow.

The archaeological notes collected since I last wrote are not numerous.

The supposed temple at Abu Amr has been noticed by Mr. Drake in his last report. I send drawings of the details, a small plan, and a sketch, showing the present strata of the ruin. The floor is a couple of feet below the general level of the rubbish, so that possibly excavation might bring some inscription connected with the edifice to light; but some time would be required to investigate the place properly.

The details are pretty well preserved, and are of a debased style of art, resembling some of the first century work at Jerusalem.

Besides this, and the discovery of a ruined khan, and of a building apparently of large extent, and probably, from a capital and other indi-



cations, originally Roman, the plan being now entirely lost, nothing of any importance has been noted.

In fact, nothing is more surprising, and especially in the part of the country at present being surveyed, than what may be briefly described as the "ruins of ruins" continually met with in every direction.

## IX.

### EXPLORATIONS IN JERUSALEM.

R. E. CAMP, UMM EL FAHM, Oct. 15th, 1872.

Another visit to Jerusalem became necessary for the arrangement of survey stores, &c., and the following notes are the results of a sort of reconnaissance carried on in my leisure time during a week spent there.

By far the most interesting objects of study is the gradually increasing collection of Moabitic earthenware of Mr. Shapira. The prejudice at first felt in England—though not in Jerusalem—with regard to these unique specimens of ancient symbolical art, has prevented my sending any remarks on this subject to the Committee, though such sketches as Mr. Drake and I had time to make, which fairly represent the character of the collection, have been forwarded from time to time. Now, however, the late visit of Pastor Weser and of M. Dinsberg (a German resident at Jerusalem) has placed the authenticity of the pottery beyond dispute, and a short abstract of the results of this journey may prove interesting. It is compiled from the notes taken from the various accounts of Pastor Weser, Mr. Dinsberg, and Mr. Shapira himself.

It appears that of this pottery smaller fragments had been previously known, and camel-loads sent by the Arabs to Damascus, where it was used for the manufacture of cement for cisterns. More perfect specimens were found at Dhiban by Bedouins in purchase of saltpetre for their gunpowder. The pottery is often so strongly impregnated with this salt, that though washed again and again, a constant efflorescence reappears in a few hours. It was then that Mr. Shapira commenced collecting through an Arab emissary; but after some four months he determined, with the other two gentlemen above mentioned, to endeavour personally to find specimens *in situ*.

The party proceeded first on a visit to Sheikh 'Ali Diab, the famous Chief of the 'Adwan, who had before been Mr. Shapira's guest in Jerusalem, and through whom many specimens had been obtained. Great difficulties were experienced in the supply of water; horses often had to be sent back four hours' distance to drink; and later the excited bearing of the Hamydeh brought the expedition to a rapid termination.

Leaving Diab's camp, the party proceeded to El 'Aab, the Elealeh of Scripture (Numb. xxxii. 7, 37; Isaiah xv. 4), and here they found a rock-cut repository some two feet deep, and long enough for two jars,



such as were sent from this spot by Sheikh 'Ali. Thence they proceeded to Hesban, which is distant about half an hour's ride, and famous for its beautiful water; but here they found nothing except some old coins, one Roman, another ancient Arabic, and one possibly Hebrew, together with broken pottery and four stones inscribed, but utterly illegible. The next point was the Camp of Fendi el Faiz, Sheikh of the Beni Sakhkhr, to whom the Hameydeh are subject, situate near Bir el Seïn (?), and from thence they proceeded to Madeba.

It was here that Pastor Weser and Mr. Dinsberg themselves found the curious pieces, of which I send separate sketches. Under a heap of more modern broken pottery two pieces were first found, on one of which a Phœnician "mem," on the other two lines of crowded Phœnician characters, were legible. Digging to some twenty-three feet, the other specimens were discovered at various depths by the two above-named explorers, Mr. Shapira himself entertaining the natives at the tent with coffee. Here, also, and at other places, men, women, and children, both boys and girls, brought numerous broken pieces; for prudential reasons they were not bought, but often thrown away in presence of the natives to prevent their getting an exaggerated notion of the value of the pottery. The ignorance of the inhabitants of the country was so great, that they mistook rocks with natural marks for inscribed stones. Pottery also was unknown, as water is kept in goat-skins only.

Diban was next visited, and the two travellers were shown by the sheikh of a small tribe the niche in which the large figure of an Astarte (?) had previously been found, and which appeared just fitted to hold it. They were of opinion that the statue was interred here, though possibly *beneath* a temple. Lying on the hill above the cave was a stone some two feet long, with a few Phœnician characters. Broken stones were also found here, and pieces, said by the natives to belong to the famous Moabite stone, were seen, as well as pieces of later date; one with a Cufic inscription, another two with engraved crosses separated by a geometrical pattern. A stone had also been found at Madeba, a hard granite block, having in its centre a representation of the sun, and on either side a moon, and beyond a star surrounded with five moons. This was possibly *in situ* in a wall of large stones.

The last ruin was Umm el Rasas, visited simply to investigate the so-called serpent stone, of which Mr. Shapira had a copy—a block of about thirty inches side, with a bilingual inscription and the figures apparently of a scorpion and a serpent. Unfortunately their intention was known to the Hameydeh, and on arriving at the place pointed out no stone was found; but surrounding stones had been disturbed, and there was evidence of a large body having been moved. Crossing accidentally the very line along which the stone had been taken, similar traces were visible at intervals of fifty to a hundred yards, and, finally, a cistern with indications, as though a heavy body had been thrown into it. Descending, it was found filled with stones, but time and the temper of the people would not allow of a minute investigation of the spot.

From thirty to forty pieces, some of which I have sketched, were brought by Sheikh Diab, as well as a fine pot, with an extremely bold inscription in plain Phœnician characters, found at Khirbet Jemil (?), near Umm el Rasas. Its translation will be interesting, as there seems a possibility of its being a votive sentence regarding the ashes of the dead. It was closed at the top, and has seven apertures, through which the ashes may have been inserted.

The expedition now returned to Zamât and Hesban, after a visit of eleven days to the country. It is to be regretted that it became necessary to undertake it, as the chance of obtaining any further specimens on reasonable terms is materially damaged. The country of the Hameydeh is now impassable, and it is with great difficulty that a further collection is being amassed. A figure even larger than the Astarte, with characters on its back and chest, in an extremely fragile condition, will, it is hoped, be got safely to Jerusalem; and if the suggestion of the use of water-glass, which we recommended to Mr. Shapira, be adopted, some of the most perishable pieces may still be preserved.

The character of the pieces found by Pastor Weser will be found to agree with former specimens drawn and sent to England, especially the Astarte with the horned head-dress, the points placed downwards, like the present coiffure of the Arab women, which is often ornamented with coins. In the later specimens one figure with horns, and curious cup-shaped protuberances instead of breasts, is no doubt a representation of the same deity mentioned previously in my first report (Letter II.) on this subject.

One great characteristic of this pottery is its fragile condition. When taken from the soil (like other antiquities found in Italy) it is fresh-looking and apparently new, but as soon as exposed to the air it will in some instances fall to pieces at once, in others it gradually becomes crusted with saltpetre as before described. Even the pieces which appear most perfectly preserved are liable to break suddenly without warning. The pottery, which at first seemed of two kinds, now proves to differ in various specimens from a soft disintegrated grey earthenware to a bright red, apparently of later date, several intermediate kinds being observable.

With regard to the character of the objects themselves, setting aside the question of inscriptions, which should not be discussed except by competent authorities, the symbolism presents many interesting features. Part is undoubtedly connected with the ancient idolatry, so often referred to in Scripture, in "the abominations" of the Moabites, in the mistranslated "grove" of the temple of Samaria, and in many different superstitious rites, including the worship of Baal Peor; whose name is preserved at the modern Tel Fa'ur, where many specimens were found belonging to this form of symbolism. The mystic number seven is continually represented on the figures, and in some cases fourteen or twenty-one round holes are arranged on one

piece. A head which I have just sent has six teeth and one opening into the nose; another has five dots, and one on each breast; a third has four vertically and three horizontally arranged; a fourth has fourteen marks representing perhaps a beard, five teeth, and two nostrils.

The triangle is also, but more rarely, found in one piece (a disc); it occurs as a reverse to the seven circular dots. The representation of the sun is also not unfrequent, one figure having sun and moon attached to its sides instead of hands (perhaps a rude symbolism of the work of Providence employing the influence of the heavenly bodies).

One most curious point is the apparent element of caricature in the heads—grinning mouths (in one case the tongue protruded), enormous noses, horrid heads, and deep-set eyes. Some resemble apes, others are seemingly bird-headed. Horns and huge ears, distinct from the crescent of the Astarte, with its horns depressed, are not uncommon. One head I now send resembles a mediæval gargoyle, other specimens are seemingly Egyptian in character.

The whole collection now numbers more than seven hundred pieces, of which we have drawn some two hundred of the most perfect and characteristic, including the calf, the so-called Astarte, the bull's head, and other fine specimens. The camel, the lizard, the serpent, the tortoise, and, it is thought by some, the leopard (Mr. Drake suggests the otter), are all roughly represented, and birds and bird-like figures of various kinds. I may remark that on inspection of the sketches two ways of representing the eye will be observed, with other characteristic points of more or less critical interest.

Some notes from the Talmud, communicated to me by an educated rabbi, may be of interest in connection with this pottery. A broken piece of an idol, a stump, or head, was not to be regarded, says the Mishna, as an idol in itself; thus it might be put to a useful purpose, if of metal melted down, if of pottery broken up and used again. This was not the case with a hand or a foot, which were in themselves objects of worship, and if found were not to be touched, but to be regarded as unclean. A curious relic of this hand-worship\* is, I am informed, still preserved in Jerusalem, a rough representation of a hand being always marked on the wall of every house whilst in building by

\* The handprint on the wall is commonly used by the Jews to avert the evil eye; care is taken to put it in a conspicuous place outside the house before a marriage, birth, or other festival. At Jerusalem a sign resembling a double arrow-head is frequently used instead, which has been explained to me by a Jew as symbolising the five names of God, as do the five fingers, thus averting evil from the place where it is imprinted. In the ruins of El Barid, near Petra, Professor Palmer and I found a cistern whose cornice was decorated with handprints alternately black and red. At the present day both Moslems, Christians, and Jews hang hands, rudely cut out of a thin plate, of silver or gold, round the necks of their children to preserve them from the evil eye. The use of the first and last finger of the hand, for the same purpose in Italy, is well known,

the native masons: several unbroken specimens of hands are found in Mr. Shapira's collection. Again, with regard to the calf, which we naturally connect in our minds with Aaron's golden calf, great doubt has been felt whether the latter was an imitation of the Egyptian Apis, or a representation of the Cherubim. Now in the Mishna the Sar Apis is mentioned as an idol; the Babylon Talmud in criticising this goes into an elaborate explanation, connecting the word with the Patriarch Joseph by some extraordinary perversion, in apparent ignorance of the simpler explanation, "the Ox Apis," which is furnished by modern Hebrew scholars.

The examination of Mr. Shapira's collection having been perfected up to date, my attention was next turned to the existing archaeological remains above the surface in Jerusalem. In a former letter (No. 6) I described the investigation of Siloam, and of the southern side of the city, with remarks on a rock-cut corner in tank No. 24, and a description of the curious Kalaat Jalud already explored by Captain Wilson. Accompanied by Dr. Chaplin I now endeavoured to examine thoroughly the north of the city, and to carry out some investigations of importance in the Haram. The results were interesting, and in one instance new; and the whole city being in these two visits pretty thoroughly examined above ground, it becomes now possible to give a definite plan of action as regards the continuation of Captain Warren's explorations in Jerusalem.

First in interest comes the Haram, especially the Platform and the Mosque itself. Much still remains to be done here, and new details may continually be observed. Thus in the diagram I send you showing the level of the rock at various places on or near the platform, some points occur not shown on Captain Warren's plan.

Within the mosque, my attention was first turned to the sacred rock itself, and I have executed a compass sketch of it, on a large scale, which contains several details which may or may not be of importance, but which are not in the plans either of Captain Wilson or of Count de Vogüé, such as the *two* drains leading to the shaft on the north side. Had it been morning instead of afternoon we might have ventured to get on to the rock, but as many fanatical pilgrims were being shown round the sacred places by the sheikh's son, I judged it safer to take measurements by offsets from the outside.

Next to the rock, the pillars of the mosque require special notice, their character being almost unknown in England. I will send sketches of all; twelve in the inner circle, supporting the drum, and twelve in the outer, surmounted by architrave blocks, between which runs the well-known wooden architrave or beam. These should be of interest, as the only correct representation of any of them is one by Count de Vogüé; but this is not, as has generally been supposed, the type of but this verges on the use of the horn or horn-shaped article, such as a horse-shoe or a charm. Horns are still in common use amongst Mohammedans, who hang them up in fruit-trees to ensure a good crop.—C. F. T. D.



the whole number, which, it will be observed, differ greatly in outline, size, proportion, and details. Of the inner circle only two are alike; the rest seem to have been brought from various older buildings, and possibly may not be of the same date, though this is a question for architects to decide, if, as I hope, my sketches are sufficiently characteristic to enable them to do so.

Of the outer row, one peculiarity is that none of the pillars have bases, but are surrounded by a sort of pedestal made of blocks of marble built up against the shafts, which are not all of equal height, so that to make up the level above the architrave blocks of two of the pillars are only half the height of those of the remainder. Eight of these pillars resemble that drawn by M. de Vogüé, the remainder differ, as shown in the sketches. The bosses in the centre of the capital are of various devices, some pillars have four different kinds on four sides. All of these, except such as are entirely defaced, I have drawn, including that on which a cross is considered to be represented, which is by no means so clearly visible as one would be led to expect by the former representation.

With regard to these capitals, which are generally described as Romanesque in character, it may further be remarked that similar ones are built up into the piers on the east entrance to the platform, and that two, seemingly of the same date, appear in the arcade of the steps opposite the "Gate of the Chain" in company with a Byzantine basket-work capital of perhaps the tenth century work.

It would be most desirable to obtain a perfect collection of capitals from the Kubbet es Sakrah, the platform, the Mosque el Aksa, and the present church of the Holy Sepulchre, as a good deal of valuable architectural criticism might be based on such a comparison. Our information at present is by no means so perfect as it may easily become on this subject.

Of visits to the royal caverns, the tombs of the kings, the grotto of Jeremiah, and other well known localities, there is no reason to speak here, as only places not sufficiently noticed or newly discovered will be of any great interest; these include the wall and ruins east of the Holy Sepulchre, the new explorations in the Muristan, the remains north of the city, and a newly discovered tomb.

The ruins east of the Holy Sepulchre were first examined by Count de Vogüé, who describes them in his book on the "Temple of Jerusalem." They are two in number, and differ entirely in character.

The first is a wall which is undoubtedly composed of masonry of a period identical with that of the Jews' wailing place. The height of some of these magnificent stones, in the part of the wall running north and south, is forty-two inches, and their other two measurements in some cases the same; the ruin seems to have formed originally the southwest corner of some building, and afterwards to have been used in the construction of the church which stood at one time on this spot; the wall was then faced on the west side with smaller stones, without any



marginal draft. Captain Wilson here sunk three shafts, and found beneath the pavement, east of the wall, large ashlar work, not drafted, the lower course at a depth of 7' 4" being underpinned with smaller stones. This is not by any means a proof that the stones were not *in situ*, as there seems reason to conclude from various ancient relics in Jerusalem, that this may have been an old method of forming a foundation. The second ruin, that of an arch of Christian period, supported on two capitals, one called Corinthian, the other Byzantine, is also noticed by both M. de Vogüé and Captain Wilson. There can be no doubt that this capital, as well as a second, apparently *in situ*, in a wall adjoining the arch which has been roughly built on to it, belong to an older building. It has, however, been supposed that the two Corinthian capitals are a pair, and I have, therefore, thought it worth while to send sketches and dimensions, showing that though possibly belonging to the same building they differ in size and in detail.

I should also be glad to have an architect's opinion on their date, as the introduction of the winged birds with heads (apparently) worked into the central device, seems hardly an ordinary element of Roman detail. Symbolical figures, the centaur, the gryphon, representing, according to Dante, the church of Christ, and many other allegorical devices, were commonly used by Christian architects, as in the capitals discovered by the Rev. T. Neil, in El Aksa, and in the slab over the south doorway of the Holy Sepulchre.

If I might be permitted to hazard a conjecture on such a subject, I would suggest that possibly the capitals might belong to the palace of Helena, Queen of Adiabene, which, we are told, stood in the centre of the lower city in the time of Josephus.

Close to this spot, in the Muristan, the excavations are being rapidly pushed, and will probably be complete in a year; several very large cisterns, lined with hard cement, have just been found. They are beneath the arcades shown on the plan just published in the last Quarterly, and near the Street of David; the rock here has been sought in vain at a depth of forty feet. I hope, nevertheless, soon to be able to send home a series of rock soundings from the Holy Sepulchre eastward, showing the slope of the valley. The method of raising water seems to have been by means of a large wheel, a space about a foot wide being left between two ribs of the vaulting to allow of its revolving.

There is no point as to which we have so many important indications, both in the archæological literature of Jerusalem and in existing remains, as the extent and direction of the northern wall built by Herod Agrippa, commonly called the third wall by Josephus. It is fortunate that this is the case, because there is also no part of the city in which there seems less probability of our recovering many more remains. The ground has for eighteen centuries been ploughed and reploughed, and in other parts the rock itself appears on the surface, more especially on the north-west; thus of foundations or even displaced

blocks of the ancient masonry there is very little chance of our now finding any remains.

Still, it is to be observed that the most has not been made of the information we possess.

The Vandalism of the fellahin is rapidly destroying the few remains which yet exist. Close to the north road the great stones in the side of a cistern where Captain Wilson's second excavation was carried out, are still intact, but those marked "old foundations" to the west of these on the ordnance survey, have entirely disappeared, having been cut up for building stone by the natives. The production of the line from these eastward, cuts those first mentioned, and thus gives approximately the line of a quarter of the whole extent of the wall. The foundations of two towers, and parts of a wall, first noticed by Robinson, are now covered up under the Russian buildings, but his bearings and measurements enable us yet to lay down the course of the third wall on the west. Thus it is only on the east where the description of Josephus (*Wars* 5. 4) and the conformation of the ground alike point out clearly its course, that any room exists for doubt with regard to the line taken by this the latest of the gigantic fortifications of ancient Jerusalem.

One confirmation of the supposed line exists, which has not hitherto been made of sufficient importance, namely, the true position of Scopus, which, we learn from two passages in Josephus, was seven furlongs from the city. In comparing the three principal passages where the word occurs (*Ant.* 11, 8, *Wars* 2, 19, *Wars* 5, 2), no reasonable doubt can be left in the mind as to the true position of the site. The place called Sapha, or prospect, the elevation called Scopus, or watchtower, and the plain from which the city, and especially the temple, were first seen on advancing from the north, all alike point to one site. From the ridge Alexander could see from far off the white robed priests, who, with a great multitude in the plain behind, came out along the north road to meet him as he advanced from that side. Here Cestius camped, advancing by the same route from Galilee, and Scopus was then (the wall of Agrippa being already built) seven furlongs from the city. Finally, it was here that the 10th and 15th legions, numbering at least 30,000 fighting men, made their camps, which, when camp followers, horses, mules, camels, and baggage are taken into consideration, must have covered at least 30 to 40 acres. Behind them, three furlongs further north, the fifth legion made its camp also on some suitable bit of ground situate near the course of the north road—an indication which, like the rest, agrees only with one site north of the city.

Now with these data in his head the traveller who, like myself, spurs up the last ridge which separates him from Jerusalem, sees sloping beneath him, east of the great north road, a plateau, which is separated by a broad valley from the town. From this ridge the dark grey wall first becomes visible, and of the Haram and of the great dome within it "a plain view might be taken." Hence this place may, to use the

words of Josephus once more, be "very properly called scopus (or prospect), and is no more than seven furlongs from the city," that is, from the remains in the cistern already noticed, as measured on the ground by Dr. Chaplin. Still further, here, and here alone, on the north, we have the natural site for a camp, protected in front by the valley, and only approachable from the east, where its front was again covered, if, as in the case of Titus, the attacking force held the northern part of the Mount of Olives. Thus it may be said that Scopus and the third wall mutually fix one another's positions; and the indications, coupled with the existence of remains on the spot, form the most satisfactory identification perhaps possible of any site near the city.

In close connection with this question comes that of the whereabouts of Helena's monument. It has been identified with the so-called tombs of the kings by Robinson, but although the position is a possible one, and the passage in Jerome (*ad Eustach. epitaph. Paulæ*) showing it to be east of the great north road, with the mention of its rolling door in Pausanias (*Greciæ Descript.* lib. viii. c. 16)—a peculiarity not known in any tomb other than the tombs of the kings at Jerusalem—alike confirm the opinion; still the author dismisses the notice given by Josephus of its distance from the city wall rather too hastily, by the remark that, though it is four furlongs from the Damascus gate, still the old wall extended about a furlong further north, thus giving the three furlongs of his authority (*Ant.* xx. 4). The truth is that the distance from the monument to the old foundations in the cistern is about two furlongs, but Josephus' words are, that it was "*no further than three furlongs*," a loose expression, which is not of itself sufficient to upset the identification. When to these indications we add that given in *Wars* 5. 2, where we learn that the Jews, sallying from the gate between the women's towers, by which the north road entered the city, pursued Titus, whom they had nearly intercepted on his leaving this road to reconnoitre westwards towards Psephinus, and continued to harass him with darts as far as Helena's monument, it becomes clear that the great sepulchre close to the north road, but east of it, with a rolling stone to close its entrance, commonly called the Tombs of the Kings, is in reality the mausoleum of the royal family of Adiabene. Its stelæ, or pyramids, have indeed disappeared, though objects of enthusiastic admiration to ancient writers, but the debased though rich ornamentation of its façade, generally allowed to be first century work, agrees well with the history of its erection by the sons of Queen Helena.

Such are the main points observable in the question of the main wall. Psephinus must have long ago disappeared, as a glance will show beneath the road bounding the Russian property; the "tower of the corner," the "monument of the fuller," alike give no indications above ground; and the sepulchral caverns of the kings, unless, as I think not quite impossible, they were really one and the same with the tomb of the royal family of Adiabene (a solution which would at once answer

the ever-recurring question, What kings were they?), must, it seems, remain a puzzle for ever.

The investigation of this quarter of the city brought to light a new discovery, that of a tomb which is at least as old as the Roman period, and probably older, situate close to the ancient remains in the cistern, excavation No. 2 of Captain Wilson. The owner of the olive-yard on this spot has commenced the excavation, and possibly found relics other than those which were left as worthless at the time of our inspection, although he has announced that he is willing to allow of our digging to uncover the remainder. Referring to the plan, it will be seen that a rock-cut scarp faces westward, along which a trench has been dug, discovering two finished and one unfinished tomb cut in the soft rock. These contain loculi parallel to the length of the excavation, and two north and south; at the eastern end above, a groove is cut in each side of the tomb, into which the slabs of stone in the sketch were fitted, thus making a second tier for a loculus, sarcophagus, or funeral vase. There appear to be other chambers on the north and south sides not yet examined. Part of the structure on the north was originally, or by later conversion, a cistern, and plaster is also found on the south, but in neither case is it very hard. The section shows where a tessellated pavement, with traces of a pattern, exists under the rubbish above the tomb. Into the second of the tombs at present opened a shaft leads from the ground above. Remains of the present pavement were visible further east, as shown on the plan.

The loculi were full of bones and of powdered bone-dust. These appear, according to Dr. Chaplin's opinion, to be very ancient, having lost all traces of animal matter; and to have belonged to a race of small men. Some fragments of thin, ancient glass, a green glass bead, of form unknown at the present day, chips of pottery, not of modern manufacture, and a small coin, almost entirely effaced, but having a device, seemingly of two figures, or possibly ears of wheat, were obtained in the tomb and in the heap of bones excavated from it.

That this was originally a place of sepulture is clear; but what the tessellated pavement above, and remains of what seems to have been a wall, can be, it is difficult to decide. Curiously enough, we have no reason to expect the existence of any important edifice in this quarter of the city; it is without the ancient third wall, and yet there seems a probability of its being a place of some interest and extent.

---

## X.

### ROCK-CUT TOMBS.

NAZARETH, Nov. 24th.

*Survey.*—The Survey has during the last five weeks been carried on in the neighbourhood of Nazareth, and on the north side of the great plain; this part we have been anxious to finish before the arrival of the rainy season, which will effectually prevent out-of-door work during part of December, January, and February.



The style of country is much more favourable to rapid and correct survey, and the length of the lines in the triangulation is on the average double that obtained in the hills. The total extent of country finished is now over 1,100 square miles, the first rains and various other causes having delayed the work during the course of last month. The extreme clearness of the air has been very favourable to the observation of long lines, and those taken from the point at Nebi Dâhy were particularly successful, including one to Mount Ebal, a distance of twenty-five miles.

The most important feature of the work is the exact determination of the watershed of the plain, which has never before been quite perfectly laid down, and which forms a very tortuous line along the high ground from Zerain to Nebi Dâhy, and to the Nazareth hills.

A day has been devoted to the tracing of the great aqueduct north of Nazareth, and a plan and section of the reservoirs connected with it have been made to the scale of 1 chain (66 ft.) to the inch.

These details are, I think, the only ones likely to be of interest to subscribers generally, the purely technical points being reserved as not necessary in a report of this kind.

*Archæology.*—The country just entered is far richer in objects of archæological interest than that south of the plain, and amongst these the rock-cut tombs form a principal group.

The interest of such remains is very great, for two reasons: first, because we can be tolerably certain that they belong to ancient times; secondly, because the existence of every such cemetery points to the probable existence of a town or village of the same date somewhere in the immediate vicinity. Thus the antiquity of a site may be verified by the discovery of tombs in the neighbourhood. That no such excavations are made at present is well known, and it is a curious feature of the country that whilst at some former time the inhabitants must have been almost a nation of troglodytes, whole hillsides being burrowed with caves often still inhabited, cisterns, granaries, and tombs, yet none of the present natives have any notion of mining or hewing in the rock.

Three principal classes of tombs are observed in the plain and in the hill country about Nazareth, each class including several varieties. The first consists of roughly excavated caves, the second of tombs sunk in the surface of the rock and covered with a stone, the third of chambers entered at one end with loculi in the sides.

The first class is exemplified at Jeba, at Khirbet Khazneh (in the plain), at Iksal (near Nazareth), and at El Jireh, on the hill above Iksal. It seems to have been used where the limestone is very soft, and the more carefully worked sepulchres of the other classes are generally cut in much harder rock. The Jeba tomb has a square ante-chamber carefully plastered, with a structural arch over the door leading to the cave within. This is far rougher, cut in a sort of cheese-like marl, with a loculus scooped in each side. A second cave to the west of Jeba is even rougher, and may probably be also a tomb, as it is regarded



as a sacred place by the Mohammedans. Khirbet Khazneh is a ruin on the east of the plain not far from Lejjun, where traces of a large building, a broken sarcophagus, a capital, a shaft, and a small Roman altar, were found on the surface, whilst beneath, a cave with four loculi roughly semicircular is excavated in soft limestone. There appear to be at least two more connected with it, but their passages were filled with rubbish, as were also the front entrances.

The cave at Iksal is the most interesting of this class, and differs from any as yet found. A large chamber, the roof of which had fallen in, was first found, with four loculi parallel to its sides, and raised above the floor about 2ft. 6in. Two niches for lamps or tablets were cut in the sides, and on the south side was a small opening through which I succeeded in scrambling into a cave with rough-cut loculi on two sides. The rock here also was soft, and much chalky *débris* had fallen on the floor. There were many bones strewed over the floor, which from their brittleness and general appearance may probably be very old; and in one loculus I was fortunate enough to discover a skull almost perfect to the orbits (the face having disappeared), and near it a jaw-bone, probably belonging to the same skeleton. A very narrow passage led out of this cave, but was too small to allow of my creeping far into it. It appeared to come to an end, and may only have been a loculus, but of this I cannot be certain.

Amongst the tombs at El Jireh are two which may rank in the first class, being also caves cut in soft stone and entered by rough and narrow passages.

The second class is extensively represented at Iksal, where close to the cave is a cemetery of perhaps over two hundred tombs. Near Seffuriyeh, and at El Jireh, other examples have also been measured.

The Iksal tombs include several varieties, single loculi sunk in the stone, rock-cut sarcophagi, tombs with a single side loculus, and tombs with two. Most of them had water-channels to conduct the rain, and some raised edges. All appear to have been closed by heavy roughly squared blocks of stone from 7ft. to 8ft. in length. There was no appearance of any special direction chosen for the body to lie in, and here, as in the other groups, the tombs faced in all directions. Seemingly more attention had been paid to the direction the water would take in running over the surface of the rock in which they were sunk, than to any other consideration. For this reason they are never used at present, as the native Mohammedans bury east and west, with the face turned south towards Mecca.

In one of these tombs two skulls were found, one very large and perfect, the other small and possibly female. The arrangement of double loculi is supposed, I am told, to be Christian, and to be intended for the reception of the bodies of a man and his wife. I do not, however, think these skeletons can have been those of the original occupants, for they appear to be more modern, and rags of clothing were mingled with the bones, the greater number in each skeleton still remaining in

something like relative position. The natives call these the "Frank tombs;" possibly they may be of crusading times.

Seffuriyeh, the Sephoris of Josephus, gives signs of having been a flourishing town in Roman times, and would merit a more complete exploration than we can manage to give to it this year. A great number of sarcophagi lie round the village, or are built into the old crusading castle, and in all that I have observed the end where the head was laid is rounded.

Near Seffuriyeh are three small sunken tombs or loculi, also with the head rounded, and closed not with a square block, but with one cut into the ordinary triangular cross section of a sarcophagus lid. Thus these tombs, though belonging to the second great class, are probably earlier than those at the Iksal cemetery.

Two tombs of the second class, sunk in the surface of the rock and closed above by large stones, are found amongst those at El Jireh. The first has four loculi on the four sides of the quadrangular sunken chamber, but they are far rougher than those at Iksal, which have semi-circular arches, and a partition separating the body from the chamber. The second has three loculi, and at one of its ends a small passage into a quadrangular chamber cut in soft rock without loculi, a curious combination of the arrangements of a sunken tomb with one entered on the level of the floor.

The last class of tombs is exemplified at El Jireh, at Nazareth, and near Kefr Minda. It appears, however, to be far less common than the other two, and these are the first examples we have found. The chamber is entered at one end, and the loculi placed with their length in each case perpendicular to the side of the chamber. The El Jireh tomb is partly fallen in, but seems to have been roughly circular in plan, with seven of these loculi radiating, and an entrance of some size. The tomb at Nazareth is cut in rather soft rock, its roof, unlike most of the tombs as yet found, is a kind of tunnel vault, and the loculi, of which there are twelve (five on each side, and two at the end opposite the door), have a similar tunnelled roof. A second close by, said to contain ten loculi, with two more outside the door cut in the sides of the passage before the chamber, was filled up and unapproachable.

Another tomb not as yet measured, but resembling those at Nazareth, was found on the summit of the high hill above the village of Kefr Minda, the most northern of our trigonometric stations, and situate within that portion of the country which was reconnoitred by Captain Anderson during the preliminary expedition under Captain Wilson. This hill is visible from points near Tiberias, from Safed, Acca, Haiffa, Carmel, and Nazareth, and would be a most valuable point but for the thick ring of oak-trees springing from the ruins of some ancient building beneath which the tomb was cut in the rock.

Large numbers of cisterns occur amongst the tombs found in the cemeteries at Iksal, and in the hill close to Tell el Jireh.

*Geology.*—The observations systematically continued of the strata

north of the plain fully confirm the deductions which I made in Report No. VII. No less than twenty-nine distinct outbursts of Trappean rock, on the east, west, and north of the plain, are now marked on my rough map. Some of these have broken through the upper strata without disturbing their dip, possibly emerging through some natural fissure; others have, as at Sheikh Iskander, uptilted the lowest beds and flowed from beneath; and wherever the formation of the crystalline dolomitic limestone appears on the surface, there seems reason to suspect the existence of basalt immediately below. The reason for the dip of the Nazareth range, which is upwards towards the south-south-east, is given by a basaltic outbreak near the village of Tinjâr, and another in the plain itself, showing the origin of this great break in the mountain system to be principally volcanic.

Of the Trappean rock there are now three varieties noticed: the black basalt of greater or less hardness, and containing generally a large amount of iron; the soft mud, apparently of basaltic *débris*, and often containing pieces of limestone, such as that noticed at Sheikh Iskander; and finally, a grey stone, containing large crystals (of vitreous lustre, presumably of augite), and resembling syenite. This is probably the coarser kind of basalt known as dolerite, and was first observed on Little Hermon (Nebi Dâhy).

The succession of four systems of strata first observed by Captain Wilson at Jifna, I have found to hold good throughout that part now mapped, but it is often very difficult to distinguish between the hard chalk with flint bands and the soft white chalk beneath, as first seen at Nablous. The upper beds are very thickly stratified, and seem to become softer where farther from the surface or less exposed. Sometimes they seem to overlies immediately the hard dolomitic stone, but in other places the interposition of the soft chalk is well marked, though apparently corresponding in dip and strike. Hence it seems probable, either that the two formations are of the same date, or that the soft chalk "thins out," to use a technical term, in some parts of the country.

The valley of the Kishon and the great upheaval (to use the old nomenclature) of Carmel, promise to be of some geological interest. I hope here to be able to make a good geological section from the Mediterranean to the Jordan, which may perhaps be useful in determining the question of the formation of the "ghor" valley. Above the dolomitic limestone on Carmel, a formation resembling the Santa Croce marble occurs, in which the first fossils (excepting nummulites at Nablous) we have yet found appeared. They were shells of *Lamelli-branchiata*, probably, as far as I can judge, of the genus *Gryphæa*. Shells were here found, I believe, by Dr. Tristram, but of what genus I do not yet know. Interstratified with these beds, a kind of rag or shelly limestone of loose consistency and brown colour was found by the German colonists at the foot of the mountain, and has been found useful and ornamental in the construction of their neat and comfortable houses.

*Natural History.*—The time of year is not now very favourable for entomology, the butterflies are disappearing, and the locusts and mantises seem half numbed by rain and reduction of the temperature. Large numbers of blackbeetles were, however, together with all species of ants, very active after the first rains, and colonies of winged ants were, till quite lately, setting out on their travels.

The collection of *Lepidoptera* now includes some hundred specimens of six out of the seven great families of butterflies, nearly twenty-four species in all. The *Arginnide* or *Fritillaries* are, however, conspicuous by their absence. The English Red Admiral has only just appeared, whether from the butterfly emerging later in the season from its chrysalis, or because it does not exist farther south, it is impossible as yet to say. Several other species of this family are common, but this particular one seems to be rare.

Of further notes we have made few. A large adder some three feet long was found at the entrance of a tomb which we were about to enter in the dark.

Amongst birds the pied wagtail, the yellow wagtail, and the robin, closely resembling our English species, appeared after the first rains.

The atmospheric effects of this time of year add a wonderful colour and shadow to the scenery. The great clearness of the air seems to reduce distance by nearly one-half, and the sharp outlines and deep blue shadows of the hills; the orange sunsets, with really purple colouring in the distant ranges; the fine banks of clouds of every colour and form; the passing storms with bright sunlight beyond; the Safed mountains with summits veiled in thick piles of cumulus; the Sea of Galilee; reflecting the surrounding hills; the Mediterranean, bright blue, with the gloomy ridge of Carmel to the south of the bay; finally, the great brown plain with white smoke wreaths from the burning weeds,—all these scenes, and many more, furnish subjects in which any artist would rejoice.

Not less charming are the various costumes, which seem peculiar to Nazareth itself. The short abba and gorgeous "kafeyeh" of the men, the white "Izar," the silk dresses, the broad scarves, and many-coloured trousers (red, green, blue, and yellow) of the women, give a crowd a peculiarly picturesque appearance, and differ materially from the sordid dresses of the poorer southern villages.

Several meteorological phenomena of interest have been noted, including broad bands of blue at sunset extending from the zenith to the horizon east and west, a meteor seen by Dr. Varten illuminating the tops of the hills and travelling slowly, a very bright halo round the moon, and several very fine rainbows.

In conclusion, our thanks are due to Mr. Zeller for his kind interest in our work, and his care to ensure our seeing and exploring all that existed in the neighbourhood.



## MR. TYRWHITT DRAKE'S REPORTS.

## X.

CAMP, UMM EL FAHM, *Oct., 1872.*

On the 28th ult. we moved camp from Jenín to this place. The heat in the plain of Esdraelon had been very great. On the 27th the thermometer stood at 107 degs. in the tent, and 103·5 degs. in the Observatory. Notwithstanding this, the result of the month's work since leaving Jeb'a is most satisfactory. A base line of four and a half miles in length was laid down, measured and checked; several cairns were, as usual, put up and observed from, and a total of 145 square miles were sketched in. Though part of this lay on the plain, the greatly increased rate of progress will be seen by a comparison with the amount of country sketched in per month when we first began: this seldom averaged more than sixty square miles. The non-commissioned officers were then, however, unused to the hard riding, and new to the country and its ways. Now, notwithstanding the great heat, the rate of work is more than twice as rapid as it was seven months ago, and I feel sure, at the same time, that its accuracy is in no wise interfered with. I am glad to be able to report also that no member of the party, either European or native, has hitherto been laid up with sickness. With the exception of a few trifling ailments of two or three days' duration, our state of health has been all that could be desired.

The village beside which we are now camped is a large one, and divided into four quarters, El Jebarín, El Mahamin, El Majáhineh, and El Akbaríyeh, each of which has its own sheikh. There are some fifteen houses of Christians, which represent a total of about eighty souls. These are mostly birds of passage, who "squat" wherever, and as long as, they find it convenient, and then flit "to fresh fields and pastures new." The natives are an unruly lot, who never paid taxes till within the last few years, and who have not yet learnt the lesson of subjection. Some days ago a man tried to seize my horse's bridle as I was passing near a threshing-floor, and insolently told me to be off, at the same time making as though he would strike me; but, seeing then that he had gone rather too far, took to his heels and fled. After a suspense of three or four days, I consented, at the intercession of two of the sheikhs, the kadi, and other village worthies, not to have the man imprisoned at Jenín, so he was brought and solemnly beaten before my tent door by the sheikh of his quarter. As civility in this country is induced by fear and a sense of inferiority, we shall probably be treated with decent respect for some little time to come. One cause of the villagers' unruliness is their wealth: they possess large herds of cattle and flocks of goats, a very considerable number of horses, and more



than the normal quantity of camels and donkeys. Their land comprises a wide tract of thicket (called *Umm el Khattaf*, "Mother of the Ravisher," from the dense growth which, as it were, seizes and holds those who try to pass through it) to the south and east, arable hills to the west, and virtually as much of the rich plain of Esdraelon (Merj ibn 'Amir) as they choose to cultivate. Besides all this, the village owns some twenty or more springs, under whose immediate influence orange and lemon trees flourish. Shaddocks grow to an enormous size; I have one now in the tent whose circumference lengthwise is 2ft. 6½in., and its girth 2ft. 3½in.; weight, about eight or nine pounds; and tomatoes, cucumbers, and other thirsty vegetables flourish. The taxes paid by the village amount to 23,000 piasters, or £185 sterling, in addition to the poll-tax on sheep, goats, and cattle, which probably comes to £20 more.

Under and immediately to the east of Umm el Fahm is the great volcanic upheaval which I mentioned in my last report as existing beneath the tomb of Sheikh Iskander. In addition to the basalt, which is mostly friable, stratified volcanic clay and mud are found in large quantities, of a yellow, red, or greenish colour, though the prevailing tint is a dusky brown. This is usually overlaid by a stratum of limestone more or less hard; that at the sides of the upheaval is distinctly metamorphic, and lower down is hard and crystalline.

On crossing Wady 'Ar'a—which, rising above Lejjun, flows in a south-westerly direction to the sea—a curious change is observable. All wild vegetation ceases, except a few thistles and plants of fennel, while the rock changes to chalky limestone at top, mixed with a few flints, and hard clay beneath, which is here used for keeping the roofs watertight. On the western side of this formation, which is closely furrowed with wadies, where it begins to sink into the Maritime Plain, lies an open woodland consisting entirely of *ballût* (*Quercus Ægilops*, locally called *Mallûl*), which here grows into trees some thirty to thirty-five feet high and six to ten feet in circumference. The thickets westward consist chiefly of *sindian* (*Q. pseudo coccifera*), *afs* (*Q. infectoria*, locally *affûs*), *sarris* (*Pistachia lentiscus*), *butm* (*P. terebinthus*), *burzeh* (a shrub with leaves very like the *sindian*, and bearing a purple berry the size of a currant); intermingled with these are a few plants of *cistus*, *arbutus*, *andrachne*, and the usual growth of *billan* (*Poterium spinosum*), sweet-leaved vines, &c., in the more open places.

The fauna is scanty: the mammals most common are wild boars, jackals, and wolves. A few leopards are said to exist, but are more frequently found on Carmel; ichneumons are very common, badgers less so. A species of wild cat—captured near Nazareth—has been described to me by Mr. Zeller as very like the bootied cat (*Felis chaus*), but without the black feet. The lynx (*F. caracal*) also exists, but owing to its very shy habits is rarely seen.

The scarcity of birds in these thickets has most surprised me; the dense growth of brushwood is just the shelter which many of the

warblers most affect, but I have been able to detect very few taking advantage of it. I have noticed a few Montagues harriers, and a peregrine falcon. Black-headed jays, the Athene owl, and kestrels are as common as usual.

The season of gathering the olives has just commenced, and the women, boys, and girls are all busy thrashing the trees with long poles and gathering up the fruit, which is just beginning to turn black. The other day a boy was killed by falling from a high branch. A litter was hastily improvised with a cloak and a couple of poles, the corpse was carried off, and, after the fashion of the country, buried instantler. The yield of olives this year is exceedingly good, as is that of all the crops except the cotton and millet. The *simsim* (sesame), which is exported to Marseilles for the purpose of being converted into "superfine olive oil," has been most abundant, and the tax collectors, local governors, and even the fellahin, will benefit from this year of plenty.

The woodlands which I have mentioned are a most pleasing relief to the eye after the bare grey rocks, varied only by patches of grey-foliaged olives, and vaulted with a glaring grey sky, like molten lead, to which we have been so long accustomed. Our first shower of rain fell on the evening of the 3rd, and though it only amounted to .005 in., the air was somewhat cooled, and the 5th was one of those wonderfully clear days, so rare in northern latitudes, which lend a charm even to the most monotonous stretch of round-topped hills. From our stations near here, Jaffa, Carmel, Jebel Sunnin (in the Libanus), Mount Hermon, the range of Jebel el Durúz, Hauran (with its prominent volcanic cones), and block of Jebel Ajlún (Gilead), were all distinctly seen.

The tomb of Weli Iskander, which stands near here, has proved a most valuable trigonometrical station. This personage is, on the authority of the Kadi, one of the kings of the Children of Israel, but I cannot find any foundation for this legend in history, unless it be some memory of Alexander, son of Herod, who was strangled at Sebaste, but buried at Alexandrium (Jos. B. J. 1 xxvii. 6). Others say that it is a *makam* in honour of Alexander the Great, of whom Moslem legends, with their usual disregard for chronology, tell marvellous tales. He was a negro, the son of El Dhab'aak, king of Himyar, and a Greek princess, and is called *Iskander z'ul Karnayn*, "Alexander with the two horns," which grew like a ram's from his temples. To conceal them he invented the turban; he also invented the fashion of shaking hands. He had an interview with Abraham in Wady Seb'a (Beersheba) B.C. 300; his conquests extended over the world, and amongst other notables he slew Yajuj and Majuj (Gog and Magog), who were each 240 feet high; and to avoid the plague which would ensue from the putrefaction of such a mass of flesh, he caused an army of birds of prey to tear off their flesh and carry it to the sea. These giants were omnivorous; they ate trees, crops, men, horses, and cattle, and were able to drink the Lake of Tiberias dry in a single day. Some of their race, who were also

cannibals, rode ants as large as camels instead of horses. Alexander was a fit hero to cope with such monsters, as his nose was three spans long and, of course, the rest of his body in proportion. Og, the king of Bashan, to reach whose knee Moses, who was twenty cubits high, took an axe twenty cubits long and leapt up twenty cubits from the earth, must doubtless have been a connection of these giants.

In several places among the brushwood we have observed square towers measuring twelve to fifteen feet on each side, and built of roughly-hewn stones two to four feet long. These, together with huge built-up cairns, and the rock-hewn wine and oil presses, are doubtless of remote antiquity.

In one ruin—Khirbet Abu 'Amir—near Kefr Kúd, we found the ruins of a building. It is probably a small temple, and there are appearances as though it were *in antis*. The stones are too much scattered and decayed for satisfactory examination. Lieutenant Conder and myself have made sketches of the ornamentation, which is much overcrowded on the cornices. All around are ruins of houses and traces of a road up to them, on which are strewn the voussoirs of a circular arch with plain mouldings. The usual rock-hewn cisterns exist, but lined with a very hard pinkish cement. This colour arises from the finely coloured pottery mixed with the lime.

Near by is a pit hewn in the soft rock, in which I was told water still collects and remains, even in the summer, after abundant rains. Beside it are some fine ballút trees, and a solid platform 35ft. by 30ft. of large roughly-hewn stones. The object of this erection is not evident; whether sacrificial or merely an oil-press is impossible to say. The tomb of Sheikh Selámeh now stands upon it.

## THE COMPARATIVE CHRONOLOGY OF PALESTINE, EGYPT, AND ASSYRIA.

BY FRANCIS ROUBILIAC CONDER, C.E.

NOT a little disquiet has been awakened in the minds of many estimable persons by the statement that the results of recent decipherments of the hieroglyphical inscriptions of Egypt, of the cuneiform records of Assyria and of Persia, and of the Phœnician tablets of Palestine, are irreconcilable with a belief in the uncorrupted accuracy, or even the original authenticity, of the historic books of the Hebrew Scriptures.

It is of no little importance to arrive at the truth in this matter. On the one hand, writers may be named who eagerly seize the occasion to impugn much to which a high degree of unquestioned veneration has long been accorded. On the other hand, the patient, unrewarded, unappreciated labours of the students of long-forgotten tongues are

discouraged and disparaged, from the fear of their questionable tendency.

The first step which intelligent criticism should take in the matter, is to draw a sharp line between the province of science and that of opinion. How much do we take from definite historic data? How much from authority? Whose is that authority? and on what is it based? The witnesses must be brought impartially into court before any jury can decide whether their testimony is contradictory or the reverse.

Accounts of the same events, emanating from opposite sources, may be compared in two distinct respects. We have to regard their historic form, and their chronological indications. In the former we must expect contradiction; opposing nations or parties invariably give contradictory accounts of the same events. Even in the late Franco-Prussian war it has often been almost impossible to believe that the French and the Prussian dispatches described one and the same action. Thus if we have an Egyptian, an Assyrian, or a Moabite account of any event described by a Hebrew historian, it is certain, *à priori*, that the colouring of the two records will be entirely reversed.

With regard to chronological indications, the case is altogether different. Within certain limits accordance must here exist, or error, in one account at least, is proved. These limits are not wide, but they must not be neglected. One chief source of variance is the differing date of the commencement of the year among different nations; or even in the same nation for different purposes, or at different periods of their history. Thus the Jews had their sacred, and their civil, year; respectively commencing with the new moon of the vernal, and of the autumnal, equinox. The Greeks commenced their years with the summer solstice. The first of Thoth, the commencement of the Egyptian year, receded by a day every four years, in consequence of the use of a solar year without intercalation. Again in reckoning by regnal years parts may be taken for units. A history of England, of which the chronology was taken from the dates of Acts of Parliament, would differ considerably from astronomical truth.

On the other hand, every great people of antiquity had certain cycles, or secular reckonings, by the revolution of which the error of various additions were checked. No attempt at defining a complete system of chronology can be of permanent value that will not endure this test. Thus the very vagueness of the Egyptian year, its periodic shifting of place, gives a value to Egyptian dates peculiar to themselves. Thus the Chinese have a cycle of sixty years, extending back to an early historic dawn. The Assyrians had a corresponding cycle—the Sossus. The Jews had one of forty-nine years, which, by its slow gaining on the decennial notation, is of the utmost value to scientific chronology.

All scholars hold that a chronological system is, at least implicitly, included in the Hebrew Scriptures. But the difficulty of clearly



defining that system has proved very great. It has been increased by the fact that the rendering given by the natural custodians of the sacred books, the doctors of the Jewish law, is palpably wrong, within historic times; the accession of Cyrus being post dated by 184 years. The Rabbinical chronology is therefore regarded with well-founded distrust.

Taking, as our APXH, in a purely chronological sense, that commencement of the sacred reckoning to which the unfortunate term *Annus Mundi* has been generally applied, we find a difference of no less than 2,549 years to exist between the dates assigned by learned men for the Christian era. The modern Jewish reckoning gives 3,761 years; Baronius, 3,951; the Greek Church, 5,606; Panvinus, 6,310. Amid all these conflicting theories, that of Usher, which is by no means one of the best supported, has been adopted in the dates printed (when any are printed) in the English Bible. No accord exists between these dates and any ancient cycle whatever.

The point at which the 488 years of the Jewish monarchy have hitherto been connected with profane history is the accession of Nebuchadnezzar. This date is taken by almost all writers from an ancient list of kings called the Regal Canon. It is ascribed to Ptolemy, but there is no proof that it has the high authority of that great astronomer. Many of the dates of the Canon are known to be accurate; some being determined by eclipses mentioned in the *Almagest*. But the length of the reign of Nabopolassar, the father of Nebuchadnezzar, is made eight years shorter than the time cited by Josephus in his reply to Apion; and that of Nebuchadnezzar himself is made two years shorter than in other accounts.

The dates given by Josephus would, no doubt, be conclusive, but for the palpable corruption of most of the passages to which reference is usually made. As we now find them, his statements are self-contradictory; so that there can be no doubt that they have been altered by copyists. We know, from a sort of preface to an early copy of Eusebius, that at one time it was thought to be the duty of a faithful transcriber to correct any error in the original. Thus, in the most conscientious manner, the present blunders may have originated.

But in passages where an obscure or little understood mark of date is inserted, there is less temptation for the copyist to make any alteration. Thus the period of 414 years from the close of the Regal Government to Antiochus Eupator (*Ant.* xx. x. 7) is one that conveys no information to any one who is not aware of the dates of the Seleucidæ. It remains, therefore, uncorrupted, and agrees with several other obscure passages in Josephus in fixing 1 Nebuchadnezzar in B.C. 595.

In the second year of Darius, it is said in the first chapter of Zechariah, the indignation against the cities of Judah had lasted for three score and ten years. In the 25th chapter of Jeremiah, v. 11, it is predicted that the nations shall serve the King of Babylon for seventy years. That chapter is dated in the fourth year of Jehoiakim, being the first



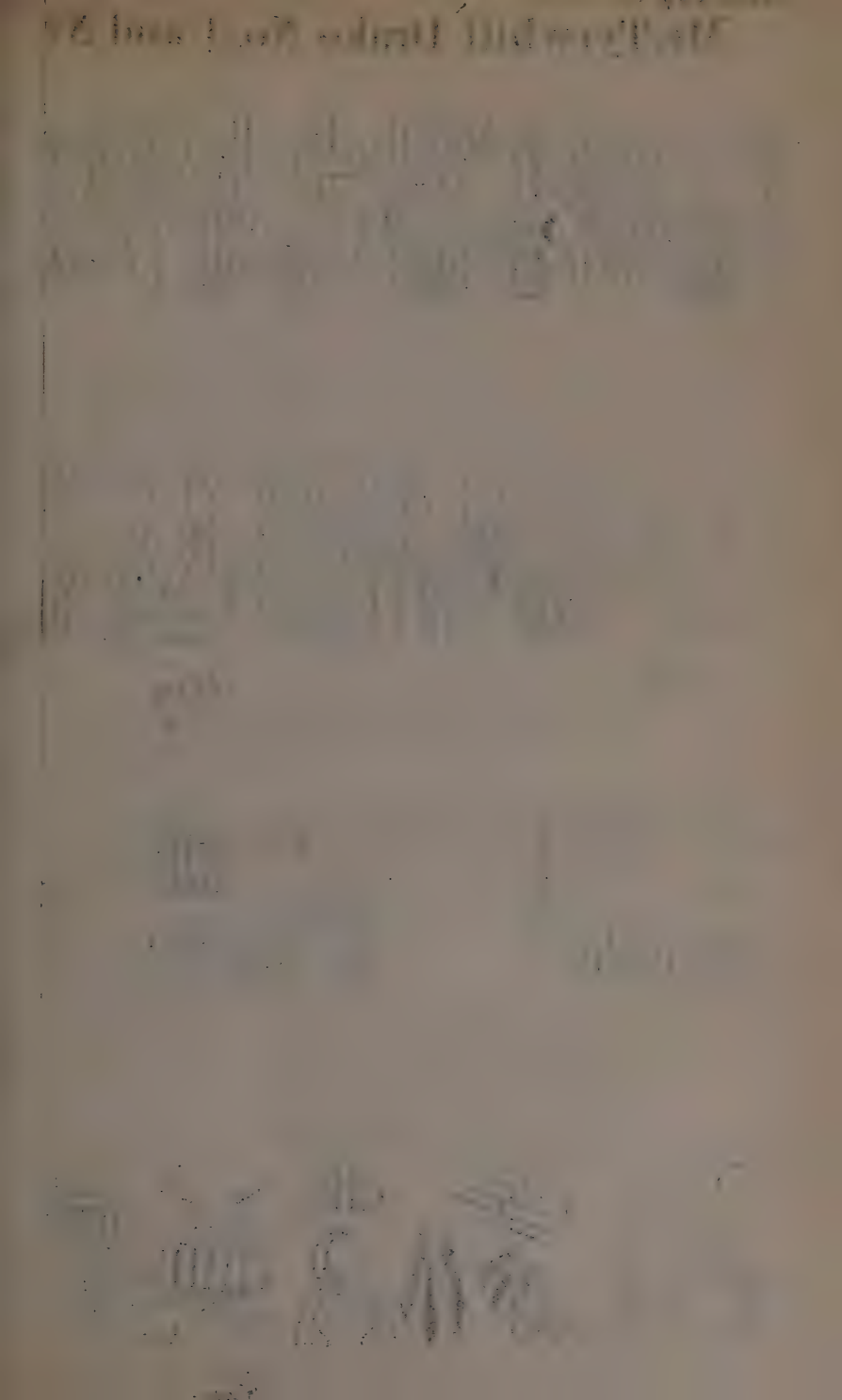
year of Nebuchadnezzar, and accords with the date, taken from Egyptian monuments, of the battle of Carchemish and the death of Neco. (The death of Josiah, according to the ordinary chronology, preceded by two years the date of Neco's accession.) Four years after that defeat, according to Josephus (*Ant.* x. vi. 1) King Jehoiakim became tributary to Nebuchadnezzar. The second year of Darius is exactly seventy years from that date.

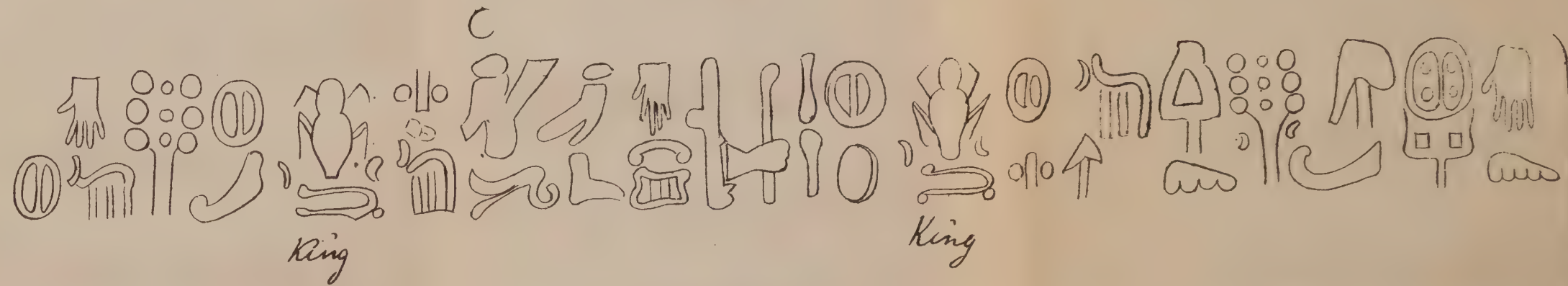
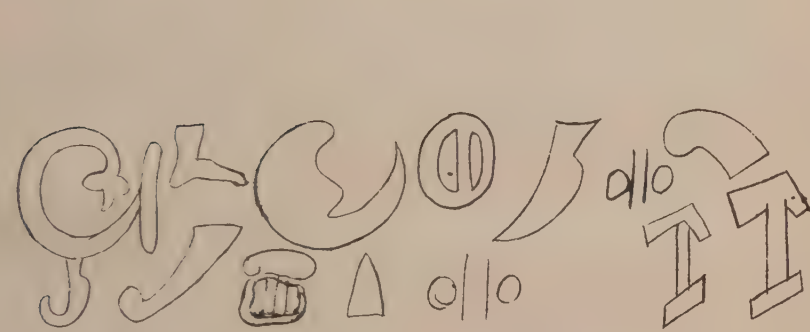
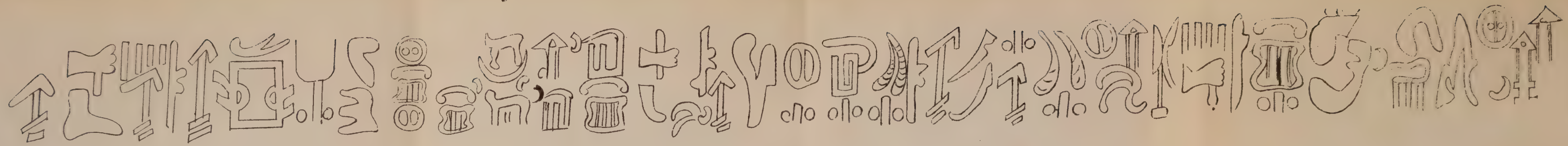
The rectification of the dates of the Jewish reigns, which is thus demanded, both by the prophetic Hebrew books and by the Egyptian stelæ, brings them into accurate accordance with the Assyrian dates, which are verified by a solar eclipse. We thus find the fourteenth year of Hezekiah to synchronise with the third year of Sennacherib, which it ought to do according to the cuneiform records. Further, the fifteenth year of Hezekiah was, according to the cyclical reckoning, a Sabbatic year. This is in accordance with verse 30 of the 37th chapter of Isaiah. In the fourteenth year of Hezekiah the land was left untilld in consequence of the Assyrian invasion. In the following year the prescribed Sabbatic rest, as to the observance of which full details are given in the treatise *Shebith* (the fifth of the first order of the Talmud), fell due. In the sixteenth year agriculture was to resumé its course. We have thus an exact concurrence of the three distinct reckonings of the Egyptian hieroglyphics, the Assyrian clay tablets, and the predictions and statements of the prophets, with the course of the great undeviating cycle of the Sabbatic year.

Another great element of accuracy in determining Hebrew dates is to be found in the twenty-six years' cycle in which the commencement of the courses of the priests returned to the same point. The Talmud informs us (*Taanith*, iv. 2) that the entire nation was divided into "*mishmaroth*," or divisions of orders, corresponding to those of the priests. When it came to the turn of each *mishmara* to go up to Jerusalem, the priests and Levites belonging to it did so, and the other Israelites of the division assembled in the synagogues to read the first chapter of the Pentateuch. Thus the whole nation had an intimate acquaintance with this revolution of the calendar. We have hence an absolute check of the date of the destruction of the temple by Nebuchadnezzar. Scaliger has preserved an ancient Hebrew verse, embodying the fact that the course of Jehoarib was in function at the time when the Chaldeans burst into the temple.

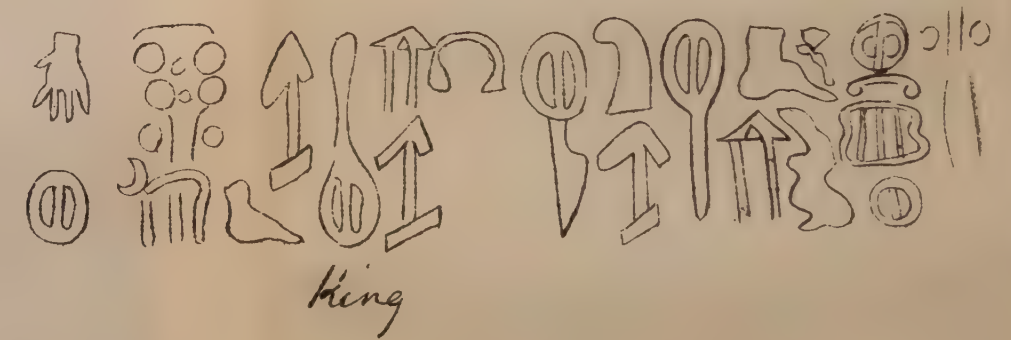
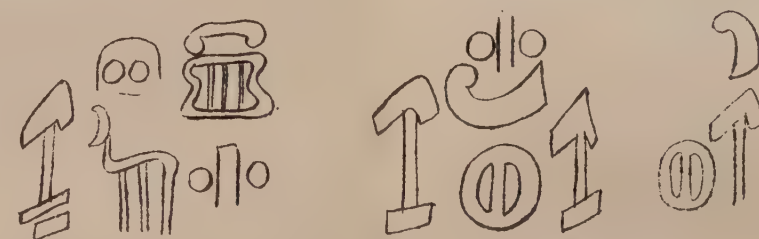
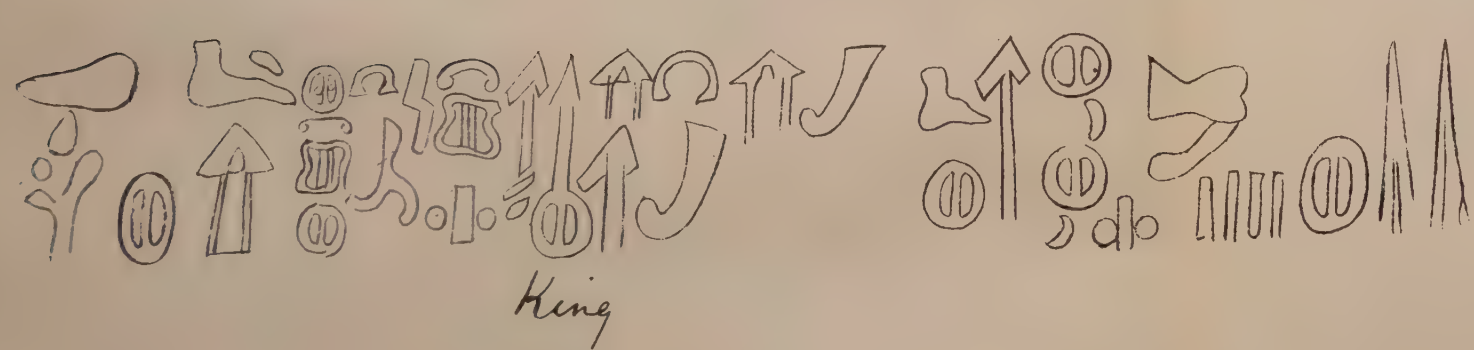
Die nonâ mensis, horâ vespertini  
Quum eram in vigiliâ meâ, vigiliâ Joarib  
Introivit hostis, et sacrificia sua  
Obtulit : ingressus est in sanctuarium  
Injustus Domini.

Jehoarib was in course from 3 to 10 Ab. B.C. 577, in which year those days fell on the Sabbath; thus affording a further, and an astronomical, synchronism.





West Side of ditto.



No. 1.  
From Sulayman's  
House.

If the Assyrian statements are read by the light of this determination of date, it will be seen that their accordance with the Hebrew Scriptures is fair and credible. There may arise a question, at times, as to the dynastic or personal name of a king; but careful investigation has removed so many apparent difficulties, that no apprehension need be entertained as to the final establishment of entire accuracy, both of decipherment and of date.

## THE HAMATH INSCRIPTIONS.

*To the Secretary of the Palestine Exploration Fund.*

DEAR SIR,—During the three months that have elapsed since I had the pleasure of presenting you with my proposed arrangement of a portion of the Hamath Inscriptions, I have no event to report bearing upon the discovery of fresh matter in this department, unless indeed I be allowed to mention the large door-post, or lintel, from Moab. The authenticity, however, of the latter has been denied in England, so I will merely remark that it is impossible that the Hamath Inscriptions in their proper form can have been known to the supposed forger of the Moab door-post, but that nevertheless about five out of the nineteen characters on that post are identical with the Hamath ones. A small inscription from Aleppo, in your hands, has also been shown me. It reproduces some of our Hamath forms, and throws light upon the proper grouping of one or two compound forms, which I had supposed to be single. No progress at all has been made towards decipherment.

In this second batch which I now forward you, the three first lines are all on the same stone—the first on the north side, the next two on the west side of the No. 4 stone, named by Captain Burton and Mr. Drake. The fourth line I have reproduced from your last journal in smaller size, for purposes of comparison with the new matter. It will be observed that I have made the arrows now point upwards, having, in fact, turned the whole inscription round bottom upwards, without, however, altering the arrangement of the symbols among themselves. My principal reason is, that I take one of the signs to be a palm-tree, whose fruit and foliage I naturally prefer to place upwards. The sign of the human foot is also thus seen to have the sole downwards.

Between the lines where I believe the kings' names to appear, I have written the word king. In the second line where I have written this the symbols are purely Egyptian. In the third line they are only partly Egyptian.

The writing, I presume, should be read from right to left. All the inscriptions together produce about forty-five distinct characters, and, *primâ facie*, such a number would indicate a syllabic alphabet, as in the Cypriote. The stage of syllabism is, of course, less advanced than that



of the consonantal alphabet with independent vowels. If Cyprus took the one and Greece the other from Phœnicia, it is well for the world that Greece should have been unready in the Thothmes age for the less perfect gift.

The state of the stone No. 4 is such that many parts of what I now send are far from trustworthy. I have bestowed a great amount of labour on the comparison of different parts of your squeezes, but am far from satisfied in some parts of the result. I conclude with saying that I see a railway survey is said to be in hand from the coast to the Euphrates, and your journals will, I hope, be forwarded to the officers and men engaged on the work.

Yours very truly,

DUNBAR ISIDORE HEATH.

ESHER, SURREY, *Nov. 20, 1872.*

### JERUSALEM.

Mr. Conrad Schick, the Imperial German architect at Jerusalem, who has recently been engaged in making measurements for the construction of models of the Kubbet es Sakhra and Haram es Sherif, for the Turkish Government, has kindly forwarded to the Palestine Exploration Fund plans and sections of certain cisterns and buildings which have not been previously described.

Anything which adds to our knowledge of the "sacred area" cannot fail to be of value, and the following notice of Mr. Schick's discoveries will be of interest to many of the subscribers to the Fund.

1st. At the north-east corner of the platform three rock-hewn cisterns,\* not previously visited, have been examined, and plans made of them. Like the well-known "great sea" in the southern portion of the Haram, they are hewn out of the soft "malaki" rock, and the overlying stratum of "missae" has been left to form a roof. The only passages noticed as entering the cisterns were the ducts for leading in the surface drainage. The cisterns are from 28ft. to 45ft. deep, and the natural rock lies close below the surface.

2nd. Mr. Schick has made a minute examination of the eastern side of the platform, and found two closed openings into it, one near the north end, which appears to have been a small door leading to a chamber under the platform, the other south of the steps in front of the Dome of Chain. This, which is almost covered by rubbish, also led to a chamber, and on each side of it is a closed window, 6ft. high and 2ft. 6in. wide. From the steps to the south-east corner, there were at one time buttresses, 1ft. 11in. thick, at intervals of 9ft. 7in. Traces of five still remain, and the position of the others can be seen on a careful examination, though the broken faces of the stones which bonded them to the

\* Two of these cisterns are numbered 2 and 34 on the Plan of the Haram, in "Recovery of Jerusalem;" the other Mr. Schick has numbered 35.



wall have been chiselled over. There is also a small cistern, apparently built with masonry, immediately below the south-east corner. The northern opening alluded to by Mr. Schick is probably that of the Cell of Bostam mentioned by Mejr ed Din, who says that the door was closed in his day; and the southern opening is doubtless that of the Cell of Samed, mentioned by the same writer as adjoining the Stairs of Burak. The door of this was also closed.

3rd. At the north-west corner of the platform, Mr. Schick has succeeded in exploring a place which is thus described by Mejr ed Din:—"Below the platform on the west there is a place called Bakh-Bakh (wonderful and beautiful), which is the place of El Khydr: it is now abandoned." This is a small mosque under the platform, 42ft. 6in. long and 23ft. wide, with a *mikrab* at the southern end. The roof is a pointed arch of rough stones, and on the west side are two openings, which appear to have been windows. In front of the mosque are two pillars of red granite, carrying an arch which supports the modern Kubbet el Khydr. The floor of the little chapel, Kubbet el Arwah, is said to be natural rock.

4th. In a small building near the Bab en Nazir, an earthenware pipe was found, bringing water from the north into the building, whence it was distributed to other parts of the Haram by three additional pipes.

5th. Mr. Schick forwards a detailed plan of the ancient remains at the Damascus Gate, and draws attention to the great thickness of the masonry on the left (east) side, in which he thinks there may be a staircase.

6th. Near the site for the new Protestant Church, without the city, four loculi have been discovered sunk into the rock, and covered with flat stone slabs. A steep flight of steps led down to them, and they are covered by a vaulted chamber of masonry.

7th. Some additional excavations were made at the tombs described by Lieut. Conder,\* but no results were obtained from them.

8th. Mr. Schick forwards a sketch of the ruins of Seilun (Shiloh), and the plan of a small building known as Jamia ed Daim (Mosque of the Eternal). The interest attaching to Shiloh, as the place in which the ark rested from the latter days of Joshua to the time of Samuel, is so great that a short description of the existing ruins may be acceptable. "Go ye now unto my place which was in Shiloh, where I set my name at the first, and see what I did to it for the wickedness of my people Israel," are the words in which the prophet Jeremiah (Jer. vii. 12) refers to it as a striking example of the Divine indignation.

The ruins of Seilun cover the surface of a "Tell" or mound on a spur which lies between two valleys, that unite about a quarter of a mile above Khan Lubban, and thence run to the sea. The existing remains are those of a *fellahin* village, with a few earlier foundations, possibly of the date of the Crusades. The walls are built with old material, but none

of the fragments of columns mentioned by some travellers can now be seen. On the summit are a few heavy foundations, perhaps those of a keep, and on the southern side is a building with a heavy sloping buttress. The rock is exposed over nearly the whole surface, so that little can be expected from excavation. Northwards the "Tell" slopes down to a broad shoulder, across which a sort of level court, 77ft. wide and 412ft. long, has been cut. The rock is in places scarped to a height of 5ft., and along the sides are several excavations, and a few small cisterns. The level portion of the rock is covered by a few inches of soil. It is not improbable that the place was thus prepared to receive the tabernacle, which, according to Rabbinical traditions, was "a structure of low stone walls, with the tent drawn over the top." At any rate, there is no other level space on the "Tell" sufficiently large to receive a tent of the dimensions of the tabernacle.

At the southern foot of the "Tell" is a fine spreading tree, and near it the Jamia ed Daim, a building of well-dressed stone, with two aisles. The longest dimension is from east to west, and there is a *mihrab* in the southern side. The building probably dates from a later period than the Crusades. To the south-east is a small reservoir with steps, and beyond this the Jamia el Arbain (Mosque of the Forty), a curious building, which has been noticed by all travellers. It appears originally to have been a mosque, and to have been afterwards converted into a small fortress, heavy buttresses having been built against the walls, closing all the doors except one.\*

Between Seilun and Turmus Aya there are distinct traces of an old road, 10ft. wide, running towards Sinjil.

The spring of Seilun is in a small valley which joins the main one a short distance north-east of the ruins. The supply, which is small, after running a few yards through a subterranean channel, was formerly led into a rock-hewn reservoir, but now runs to waste down the valley. There are numerous rock-hewn tombs near Seilun, generally of the same character, a small vestibule, from which a low square door leads into the tomb-chamber. Near the fountain, however, there is a peculiar tomb hewn in a huge fragment of rock. It consists of three loculi, two in the face of the rock and one on the top.†

C. W. W.

\* Photo. 99 gives a view of this mosque, and Photo. 100 a general view of the ruins.

† See Photo. 101.

# PLAN OF SHILOH (SEILÛN) AND ITS NEIGHBOURHOOD.



From a Sketch by M<sup>r</sup> C. Schick

Stanford's Geog. Ketab<sup>s</sup> 6 & 7 Charing Cross.



## THE CLIMATE OF JERUSALEM.

To the Editor of the "Quarterly Statement" of the Palestine Exploration Fund.

SIR,—Will you permit me to correct, in your next issue, two mistakes in the remarks upon the climate of Jerusalem, which were reprinted in your January number from the Journal of the Scottish Meteorological Society?

1. The rainfall for the season 1863-4 is given as 8·84 inches: it should be 19·175 inches. The error arose from the earliest returns to the Scottish Society having been from observations made with a pluviometer sent out by them, and which proved so ill-adapted for this country that its use was soon discontinued.

2. It is stated that "the sirocco occurred twice," implying that it occurred *only* twice. Some of us, whose lot it is to live in this country, would be only too happy if the sirocco were experienced not more than twice in three years and a half. The fact is, that at certain periods of the year it is one of our most frequent winds, being especially prevalent in the beginning of summer (May), and again in September, October, and November, just before the setting in of the rains. The trying weather, described in Mr. Buchan's paper as having prevailed during the epidemic of cholera in 1865, was due to sirocco.

A remarkable fact in connection with this wind, and one which goes far to account for its peculiarly depressing effect, is that it is *utterly destitute of ozone*. For many years I have been in the habit of experimenting upon it, and have always failed to obtain the slightest discoloration of the ozone paper when the sirocco was at all severe. At one time it occurred to me that the excessive dryness of the atmosphere might possibly prevent chemical action, but the result was the same when the paper was kept moist by allowing one end to remain in a cup of water.

Your obedient servant,

THOS. CHAPLIN, M.D.





THE  
PALESTINE EXPLORATION FUND.

---

PREFACE.

IN the letters and reports of Lieutenant C. R. Conder and Mr. Tyrwhitt Drake will be found the usual record of work done during the last three months. In February portions of four more sheets of the new map arrived in England, making a total up to the present of 1,250 square miles, which represents the whole of last year's work. The Committee have now made application for another noncommissioned officer of Royal Engineers to strengthen the party and accelerate the survey. If their application to the War Office be granted, as on all previous occasions, the new man will be sent out at once; and if we could see our way to sending out another in addition, the progress of the new map would be very rapid. As to the work already done, it lies in the office of the Fund, ready to be inspected by any who may wish to see it. It is in the highest and best kind of map-making, on a scale of one inch to the mile, and will give, when completed, a perfect map of Palestine as it is, with every village, every ruin, every *tell*, and every existing name. As regards the publication, we shall probably have a plan agreed upon by the Committee before the issue of the next *Quarterly*. At present we can only say that as the sheets are completed they will be published, without any unnecessary delay, in the best style possible, and by the best map-makers in the country. The part of Palestine already surveyed appears in the illustrative sketch-map of the frontispiece. The surveyors are now on the coast, the last letters from Lieutenant Conder speaking of the ruins at Athlit, of which he promises sketches and plans. We have not yet received the sketches and plans of those ruins over which they have already passed. Lieutenant Conder has made careful drawings and examinations of every one for the Committee, and will probably send them home by the first safe means.

The Special Fund for Jerusalem is open, as will be seen from our business sheet. Those subscribers who wish to devote their

gifts to the further exploration of the Holy City, have only to notify their intention to the Secretary.

The American party have started on a preliminary expedition east of Jordan. We hope to have accounts of their progress in the course of the year.

It is gratifying to state that the sale of the new book issued by the Fund is going on more favourably than was anticipated. Nearly five thousand have now been sold, and the new edition, which is in the press, is already largely ordered. The Committee, it must be borne in mind, had in view, in the issue of this book, two objects: first, to show what had been done; and, secondly, to show what yet remained to be done; that the perfect exploration of the Holy Land is no visionary scheme of a few theorists, but an urgent and crying necessity, by means of which controverted points may be decided, the bounds of controversy narrowed, and the history of the Bible brought out in fuller light.

A new arrangement has been made with regard to the photographs of the Fund. Many of these, taken for an archæological or architectural point of interest, have not proved interesting to the general public. A few new ones have been added. A selection of one hundred has now been made, and the following arrangement has been decided on: they can be purchased by Subscribers, instead of at the old rate of one shilling each, at one guinea for twenty-five, two guineas for fifty, or four pounds for the whole set of one hundred. Mr. Stanford, 6, Charing Cross, will still be the agent. The new list, with two recommended lists of twenty-five each, will be ready in a few days.

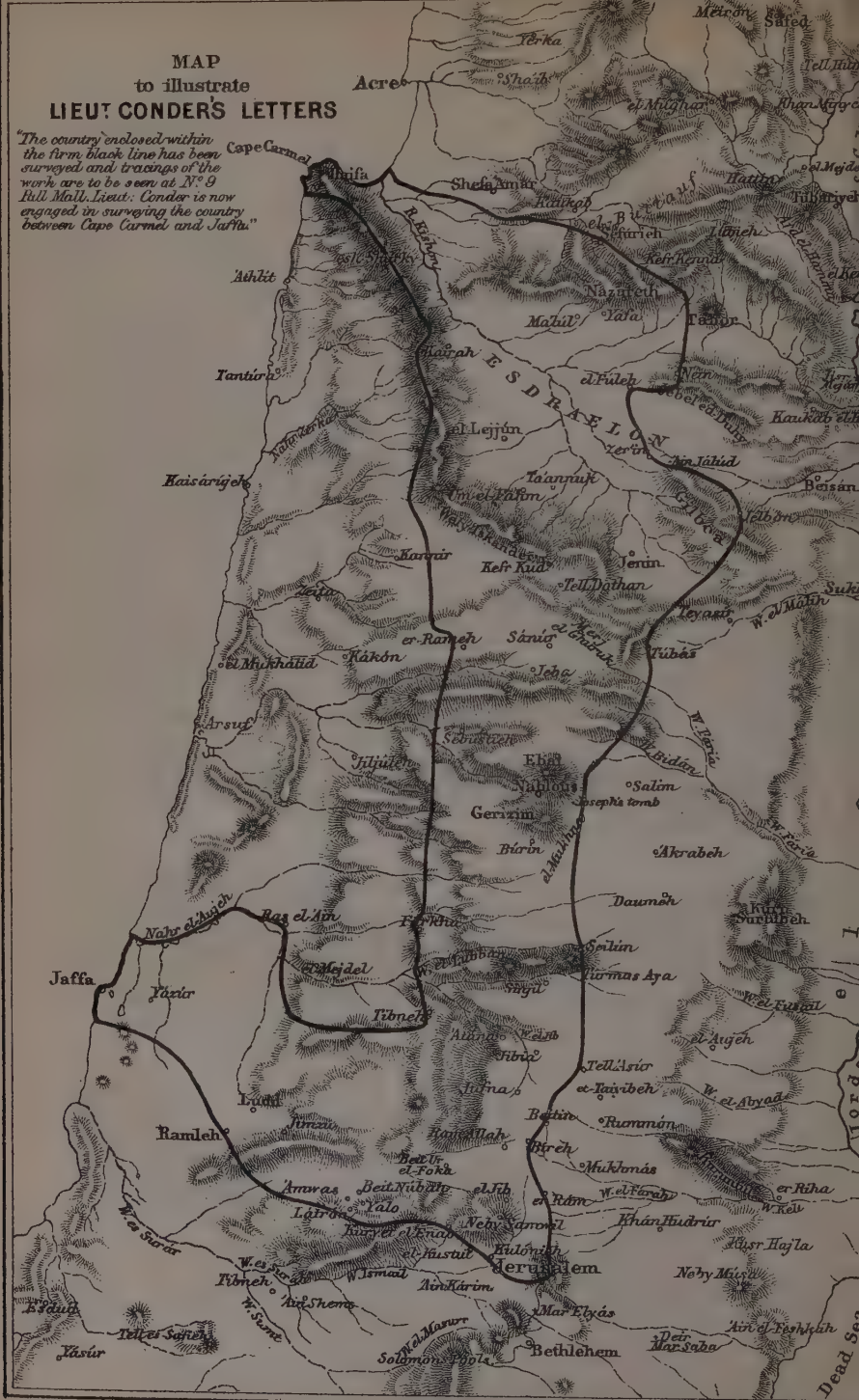
We propose to hold an exhibition in the summer, and have taken the Dudley Gallery for the purpose. We are very glad to announce that, owing to the kindness of Mr. Harper, we shall be able to show the whole of his beautiful sketches of scenery in the Holy Land; we shall also be able to exhibit some of Mr. Simpson's pictures of Underground Jerusalem. M. Clermont-Ganneau has promised a facsimile cast of the Moabite stone. This will be the first time this invaluable *stèle* has been exhibited. There will also be a cast of the recently found stone from Herod's Temple; casts of the Hamath Inscriptions; and, besides other things, the whole of the photographs, collections, models, &c., illustrating the survey of Sinai. It is hoped to open the exhibition very early in June.

It will be seen that the spelling of the Arabic names in Mr. Drake's reports differs from that previously adopted in printing his reports. The spelling is now his own. In the next *Quarterly* he will give his reasons for differing from Dr. Robinson and others.



MAP  
to illustrate  
**LIEUT CONDERS LETTERS**

"The country enclosed within the firm black line has been surveyed and tracings of the work are to be seen at N<sup>o</sup> 9 Hall Mall. Lieut. Conder is now engaged in surveying the country between Cape Carmel and Jaffa."





# THE SURVEY OF PALESTINE.

LIEUT. CLAUDE R. CONDER'S REPORTS.

## XI.

### WINTER WORK.

R. E. STATION, HAIFA, *Jan. 20, 1873.*

*Survey.*—In sending home another instalment of our survey, I find a good opportunity for a review of the work which we have done since last July, when first I became personally concerned in the Expedition.

The Ordnance Survey of Palestine now extends over rather more than 1,250 square miles, the work of little more than a year, and representing about one-seventh of the total amount which it is proposed to include. Viewed in the light of work accomplished by a most insufficient party (as far as numbers are concerned), this will, I imagine, be considered a result more satisfactory than could have been expected; but, on the other hand, the fact that at the present rate six more years would be required to complete the undertaking, points to the extreme desirability of increasing the number of men to be employed in the work. 1250  
= 1/7

It is calculated that during the first period up to Nablus the monthly rate of progress was about 110 square miles. From Nablus to Haifa it has been slightly over 140 square miles. Thus, up to July, 1872, when the first tracings were sent home, 560 square miles were completed with the exception of the hill-shading. The present tracings contain, roughly speaking, 700 square miles, and are complete, the hill-shading being included.

The main reason for this increase of thirty-six per cent. in the rate of work I take to be the increased size of the sides of triangles in the triangulation, which is rendered possible by the less mountainous character of the country. The detail has been almost as close in the plains as in the hills; the number of ruins visited and examined has been greater, but as it is possible to ride faster, and therefore farther, in the plains, the possible distance apart of trigonometrical stations has been greatly increased. Thus in the Judean hills the average length of the side of a triangle was five miles; in the Plain of

Esdraelon it may be taken as about ten; and in the country between Nazareth, Cæsarea, and Akka, at fifteen. Nor has the accuracy of the work in any way suffered, as is proved by the calculations for latitude, which agree within two or three seconds with those of the Admiralty Chart for Akka and Cæsarea, and agree also as nearly as can be plotted with the triangulation. Finally, as commanding points have always been chosen, the detail also has, during the clear autumn weather, been observed from the stations with as much exactness as was obtained with smaller triangles.

I have already reported on the satisfactory manner in which the second base was measured and checked. Haifa is for another purpose as important a station as the Plain of Esdraelon was for checking the plan or azimuth measurements of the triangulation. The heights of the trigonometrical stations are fixed by a chain of vertical angles starting from Jaffa and running up the country to Nazareth, and down to the sea-coast at Haifa. The most direct line observed is carried from one to another over eleven points, whilst other lines, which serve as checks, include even a greater number of successive operations. The error, if there is any, will therefore have increased gradually; and to test this the actual height of the last point (the Convent on Carmel) has been ascertained by another method to be 556.25 feet above sea level. We are not able, as in the case of the base line, to report on the result of this check, which must await calculations to be made in England, but there is no reason to suppose that the result of these observations will turn out to be at all less satisfactory than that of the measurement of the second base.

There is only one other point in the technical part of the work which is likely to be interesting to subscribers generally: this is the representation of the hills, which has not been previously added to the map. One of our late visitors complained that in no map which he had ever seen of Palestine was there any idea given of the character of the surface of the country, which is certainly a very peculiar one, as the almost equal heights of most of the hills, and the frequent deep and stony valleys which are often concealed until close at hand, and in many cases extremely tortuous, are features very different from any in at least English scenery.

The large scale of our map allows of these features being well shown. The method employed is that commonly used in the Ordnance Surveys of showing the slopes of the hills, not as though a light fell upon them from a corner of the paper, but simply with regard to the comparative steepness of the gradients. Thus the darker shades represent the steeper slopes according to a definite scale, and although on a larger map the accidents of the ground would be even more minutely distinguished, still for its scale the one-inch survey of Palestine would form a perfect military map, as the practicability of the gradients for the passage of infantry, artillery, or cavalry, could be at once obtained by use of the scale of shade. A commander would

indeed be unprepared for the extreme stoniness of the country, which would render military movements very tedious, and for the condition of the roads, but these are not details which it is possible to show on a map.

*Archæology.*—The return which accompanies the maps will, I hope, give a distinct idea of the character and conditions of ruined sites in Palestine, an idea which it is difficult to convey vividly in a short report. A few words may therefore be added in explanation of the return. The number of ruins is approximately 200, of which, however, twenty-one per cent. are evidently modern and of no interest, being merely inserted because they are marked as ruins on the map; these include the small towers of drystone walls with a roof of mud, which are placed in conspicuous positions above the fig, olive, and vine plantations, and from the top of which the watchman looks out to guard the fruit from thieves. By reason of their hasty construction they fall readily into ruins, but are easily distinguished from more ancient and interesting remains.

No less a proportion than thirty-five per cent. of the ruins are, it will be observed, marked "Indistinguishable" or "No indication of date." The state of preservation of the ruins seems to preclude the possibility of assigning a date. The "indistinguishable" ruins consist of heaps of broken stones, worn by the heavy winter rains, until all idea of their original form, finish, or purpose is lost; often the only indication is the grey colour of the mound, to which the name of Khirbeh is attached, or a few scattered stones; rarely indeed is a shaft, base, or capital discovered lying without indication of its position in the original building, and none yet found can date before the Herodian period. In fact, the site of a true Jewish town may be expected generally to give no further indication than the dusty mounds described, except, indeed, such as is derived from the vicinity of rock-cut tombs and reservoirs or channels which, as at Anin (identified by Mr. Drake with a Jewish town), exist close to the accumulation of powdered masonry of some two thousand years ago.

In some cases the old materials have been used in newer constructions, and these again have fallen into ruins almost untraceable; still more frequently pillars and stones have been rolled down hill or carried away for use at a distance.

Thus, for instance, at Nablus the granite shafts, belonging possibly to the Samaritan temple on Gerizim, are to be found amidst the ruins of a Roman villa in the plain, and again in another site of same date at a little distance, whilst even to the present day the habit is continued by the natives, and of the fine blocks once strewn round Tell el Semak, near Haifa, no trace but the holes dug in excavating them is left.

In an archæological point of view, such ruins, though not more effaced than would be expected, considering their great age and the violent action of the weather upon them, are of course wholly without

interest; but when their presence confirms the arguments to be deduced from comparison of names, from incidental references in ancient writers, or from similar sources of information, their true value becomes apparent. Hence even the most unpromising are carefully noted, and already in many instances their discovery has proved of greater importance than could at first be expected.

Turning from these, which form the majority of the remains tabulated, to others in a more perfect condition, the first in interest are perhaps the *tells*, of which eighteen principal examples are scattered over the great Plain of Esdraelon and that of Akka. Their artificial nature is plainly shown by their position, though the name is also given to natural hillocks, such as the Tufel el Jahraah, which are volcanic outbreaks. In the great plain they appear towards the foot of the hills, on the west and north, generally at the mouth of wadys. No doubt they were originally intended as military posts, perhaps thus guarding the principal inlets by which incursions from wild mountain tribes were to be feared. Their shape is roughly oval, or circular, with sides sloping at between thirty and forty degrees; in size they vary from that of Tell Mutasellim, large enough to be the site of a considerable town, to that of such small mounds as Tell el Subat, which is merely a low mound; in height they must in some instances be over thirty feet. They are covered with coarse grass, and with thistles, which often attain a height of seven or eight feet, and during a part of the year present a formidable barrier. The ruins on these *tells* are in many instances far more modern, as at Tell Kaymun, mentioned later, but the original builders may have belonged to the Canaanitish period. Unlike those mentioned by Captain Warren in the Jordan Valley, it would seem probable that they are formed of, or cased with, stone such as that of the surrounding hills; but none of them gave any indication of a favourable spot for excavation, as much time and money might probably be expended with but small result.

Next in interest to the *tells* come the rock-cut tombs and water-channels, of which we have found twenty-six groups. The water-channels were found at Anin, Lejjun, Kireh, and near Saffuriyeh. In the first three cases they are passages resembling the famous one at Jerusalem, between the Virgin's Fountain and Siloam, just broad and high enough for a man to walk in, and terminating suddenly. At Lejjun and Kireh there was a stream of water ankle deep flowing through the passage, and a sound of trickling water at the end, which, in the three cases, was at a distance of some twenty feet from the entrance. The reservoirs near Saffuriyeh are, however, on a far larger scale. They were kindly shown to us by Mr. Zeller, who also, I believe, took Captain Wilson to the place, and a couple of days were spent in planning them, and in tracing the aqueduct which brought water to them. Mr. Drake has already referred to them, so I will merely add that the passage at the western end is choked, and is one of the places where excavation would be desirable, as the ultimate destination of the



large quantity of water thus collected is not at present clear. In each of these four cases a rock-cut cemetery exists in the immediate neighbourhood of the water-channels, and no doubt an ancient town, of which both tombs and aqueducts are the only remains, was also situate near to them.

The groups of tombs may be divided into three classes in the table: those with the well-known *loculus* running perpendicularly in from the walls of the chamber; those with *loculi* in arched recesses, or some other arrangement, counting with them such as are blocked up or broken away, so that it is impossible to say that they have had perpendicular *loculi*; finally, tombs like those at Iksal, already described in a former report, which appear to be of Christian origin. Of the last class there are but two other examples; of the first, or indisputably Jewish tombs, there are ten groups, and the remaining fourteen are included in the second class. The most important of these groups is that at Shaykh Abrayk, where I examined and measured fourteen separate tombs besides the great system of chambers, of which I have already sent home a plan, as well as two others called Magharet el Jehannum and Magharet el Siah, the latter being on a gigantic scale, the side recesses fifteen feet long, and the height of the farther portion of the cavern about twenty feet.

A few remarks on the principal deductions to be made from a comparison of these tombs, will not be out of place here.

It is generally supposed that the perpendicular *loculus* is distinctive of Jewish tombs, and M. De Vogüé lays much stress on the fact of its non-appearance in other countries. At Shaykh Abrayk, however, as well as at Haifa, the perpendicular *loculus* is found associated with two other arrangements of what may be called *attached sarcophagi* standing in arched recesses at the sides of the chamber. In these cases the perpendicular *loculus* appears nevertheless to be the oldest; it is always found in the outer, never in the inner or subsequently excavated chambers. In one case three such *loculi* have been destroyed in subsequently enlarging the chamber; in others they exist on the level of the floor, and below *loculi* raised some three feet, and of different character. It appears just possible that this peculiar arrangement may have been for some special purpose or class of corpses, as distinguished from those of the parallel *loculi*. In one tomb at Shaykh Abrayk, in which these *loculi* occur, a single word is written in Greek letters with red paint in the inner or newer portion of the tomb. At Haifa a rough representation of the seven-branched candlestick appears outside a sepulchre containing both kinds of *loculi*. Neither of these indications of date are, however, conclusive. The Greek-writing nation may have enlarged an ancient Jewish tomb, as indeed the destruction of three of the perpendicular *loculi* would seem to point out; whilst, on the other hand, at Haifa the tomb is in the present Jewish cemetery, and may have been re-used by the Jews, and the sculpture be thus later than the tomb.

On the whole, however, there seems to be nothing in these discoveries



to contradict the opinion that where we find tombs with the perpendicular loculus we have a trustworthy indication of true Jewish handiwork.

M. De Sauley mentions a tradition in connection with his discovery at the so-called Tombs of the Kings at Jerusalem, that the roofs of sepulchral chambers intended for women were formed of two planes meeting in the centre, which was the highest part, whilst those of the chambers for men were either flat or arched. Of the former construction I have found one example at Shaykh Abrayk, in a tomb consisting of one chamber, with places for eighteen bodies, and an unique arrangement. In one of these loculi I found a perfect but very ancient skull.

In conclusion, it appears that not unfrequently two tiers of chambers existed above one another, and often a hole broken in the recess behind one of the loculi leads to another system of chambers, which in some cases *seem* to have no other entrance. Many loculi are so small that they must have been intended for children.

So curious and interesting are these tombs that I might fill many pages with descriptions and notes upon them, which, however, I must reserve for a future report. It is to be hoped that a perfect, or almost perfect, collection of plans from every part of Palestine will in time materially increase our information as to their date and history.

We can only point to three ruins besides the tombs and water-channels with any certainty as being Jewish. These are, the terraces and ruins of Kh. Jafa, the ancient wells and indications of ruins at Tell Dothan, and the curious cairn at El Mintar. Of the indistinguishable remains, however, a large proportion may most probably be previous to the Herodian period.

Next in order come the Roman ruins, of which we have found twenty-three indisputable examples; they are not, however, of any great importance, with one or two exceptions. The reservoirs near Saffuriyeh just mentioned are, from the cement, Roman in all probability, as well as the aqueduct leading to them, which we traced for a considerable distance, and found that it was possible for it to come, as it is said to have done, from the Ain el Jinán. It is partly built in rustic masonry and mortar, but during the greater part of its length seems to have been merely a small rock-cut channel, as described by Mr. Drake. The temple (as we suppose it to be) at Kh. Abu 'Amir is also no doubt Roman. I have already mentioned it in a report, and sent home a plan and drawings of the details, such as still remain. It is quite possible that a little excavation here might bring to light something of interest, possibly an inscription. The floor is covered with some four feet of rubbish, so that mining would be out of the question. We did not, however, at the time think it advisable to stay for such a task, as the discovery was made in September, when we were at Jenin, and most anxious to move from a temperature of 108° Fah. in the plain to the cooler atmosphere of the hills.

There can be little doubt that Shaykh Abayk was a place of some importance in Roman times. Capitals, foundations of walls, and the extensive cemeteries which seem to me to show two periods of sepulture—the Jewish on the eastern, the Roman on the more western hills, all point to this fact. The place has been curiously overlooked before, and its identification will be one of interest. A small building, possibly a temple, exists near the town at a spring, and is known as El Is-hakiyeh.

One other point remains where excavation would be desirable, as well as at Abu 'Amir, and in the reservoirs at Saffuriyeh: this is the ruin of El Jireh, near Nazareth. Report X. gives an account of the tombs, which I thoroughly explored and measured; but the ruin on the tell we were unable to examine. I understand from Mr. Zeller that vaults of megalithic masonry (drafted, I believe) support the mound in part, and we employed a native for one day to excavate a passage from above, where the sinking of the surface indicated that the vaulting had given way. His attempts were unsuccessful, and I found that some half-dozen men would be required, and several days would no doubt elapse before we could get through the surface rubbish. Should the Committee consider it worth while, we could easily devote a little time to this exploration when camped in the neighbourhood again, as El Jireh is near the edge of our work. Cement-lined cisterns, scattered stones, a pillar shaft, a bit of plain cornice, and a couple of caves, with traces of the old road to the place, are the only remains to be found on the exterior of the tell; the spot is, however, very well known to the natives, and may prove a site of some interest.

The fine structural tomb of M'alul, first visited by Captain Wilson, the remains of a probable Roman villa at Nablus, which we excavated partially, the Herodian colonnade at Samaria, the altar and sarcophagus at Kh. Khasneh, the ruined building at Lejjun, have all been mentioned in previous reports, and I have taken such plans and sketches as were rendered possible by the condition of the ruins.

To pass on to later times, the Byzantine and early Christian ruins are next in chronological order. These include the two churches of Justinian at Nablus already visited and explored by Captain Wilson, the interesting but almost untraceable little church newly discovered by Corporal Armstrong on Tell Kaymun, of which I have a plan, and the two small convents at the 'Ain Umm el Faruj, mentioned by Mr. Drake in his last report.

Of Crusading, or early Saracenic ruins (for it is not always easy to distinguish between the two), the list enumerates twelve, including the tower of Saffuriyeh, the Burg-Fara'a in the wady of the same name, the tower near Jenin, and the small forts or Khans (in both cases with tower attached) at Rushmia, near Haifa, and on Tell Kaymun, the tower at Iksal, the church of St. John at Samaria (already well known), and the remains of the fosse round the once important town of El Fuleh.

Although the earlier Crusading buildings, when the rounded arch of the Italian Gothic was still retained, are easy to distinguish, those structures which were built *after* the first half of the twelfth century are nearly connected with the early pointed Saracenic style. The use of a draft also was common to both styles, the centre being left with a rustic bow projecting on the average six inches; the draft being three inches broad, and sunk about the same amount; the stones, well proportioned, but of no great size, being on the average five to six feet in length. To this style the tower near Umm el Fahm, which has been called a *vineyard tower* by Mr. Drake, as well as two which I discovered and sketched on the hills east of Jenin, belong. In one of these I found the remains of a door and the shafts of two small pillars, much worn. The object of these small towers, the largest of which is only some thirty feet in length and breadth, is not to me at all clear; they occupy positions at some elevation. Near one (the Kasr at R'aba) no less than five rock-cut cisterns or wells, near the other no water at all, is found; they are not placed in specially commanding situations, as in the case of the Rushmia fort or the building at Tell Kaymun, and altogether they are puzzling both in style and in locality.

Such is a brief account of the archæological explorations which have been carried out during the last six months. More detailed notes, plans, and sketches, await a time when our work shall leave leisure to put them into a connected form, and are carefully stored in order in my note-book.

To sum up, we find 35 per cent. of the ruins "indistinguishable." Of Jewish remains, the rock-cut tombs and reservoirs, the tells, and a few ancient wells and cisterns, are the principal; tombs, reservoirs, temples, and traces of a town, are amongst the Roman remains. Churches and towers represent the works of Christian architects. Adding together Jewish and Roman remains, we find some 35 per cent. to be of interest in illustration of the Bible and Josephus. Were *all* the "indistinguishable" ruins Jewish, we should have 70 per cent., the value of which future examination of the literature of the subject would show, but this proportion cannot be reasonably expected. It seems probable, however, that we have now collected in the country between Nablus and Haifa alone, at least one hundred ruins, which may some day serve to throw light on the Biblical topography of Palestine.

*Geology.*—The later portion of the geological map has proved more interesting than that mentioned in former reports, and I now send home a tracing of the part already complete. It extends from Nablus, where I first commenced it, to Haifa, covering the same ground shown in the traces (700 square miles) and is on a scale of four miles to one inch, sufficient to show all details of importance. The various surface formations are shown by different colours, and a short explanation only will be required.

The blue represents the hard limestone, which includes the following varieties, following apparently in the order given :

1. *Hard dark-grey dolomitic limestone*, the lowest formation of all, generally thinly bedded and splitting into cubes, which gives the appearance of an ancient pavement; it is, however, often in the lowest valleys found to be bedded in thick steps like the "scala" limestone. It is crystalline, and coloured with salts of iron. It is full of natural caverns, the formation of which is a matter for discussion. It contains no fossils, and generally exists where the basalt appears, whence it may be thought to be metamorphic. It belongs to the Neocomian period, that of our own greensand.
2. *Hard, compact, fine-grained limestone*, very crystalline, and breaking with an almost conchoidal fracture, a sort of yellowish grey colour, and bedded more thickly than the former.
3. *Similar to the last*, but thinly bedded, very white in colour, and containing numerous layers of large flints.
4. *Grey, hard, crystalline limestone*, containing *Gryphæa Capuloides*, *Corbula Syriaca*, and other species belonging to the period of the English lower chalk formation.

The next series of formations found at Nablus, immediately overlying the uptilted dolomite, is coloured with yellow ochre, and contains only two varieties—the soft, cheese-like marl, which can be cut with a knife, and which does not seem to harden on exposure; and a very thinly bedded (laminated, one might almost say) but harder chalk, which contains a few flints, and which I observed on the summit of Carmel, where it appears suited to the growth of the *Pinus Aleppensis*, here found in abundance.

The distinction between this group and the upper beds is not well marked, as I have already had occasion to notice, but the principal distinction is the external appearance, for the more recent chalky limestone does harden, externally at least, on exposure to the air, and is found to be softer and softer the farther from the surface one goes, though very often hard veins, almost crystalline, run through the soft.

The principal varieties of this series, which is coloured green, are as follows :

1. White calcareous limestone, containing a few fossils, and soft when quarried, but hard and dark-coloured on the exterior. It contains no flints.
2. Hard, semi-crystalline limestone, ringing like a bell when struck, very white. Interstratified with former.
3. Beds of flint conglomerate (as near Nablus), ten to fifteen feet thick, very hard and compact.
4. Limestone in beds ten feet thick, soft internally and full of very large flints.

The Nummulitic limestone, common in the south of Palestine, does



not appear in the part of the map now completed, in the Jebel Nablus and Galilee.

The German colony at Haifa have carried extensive quarries into the sides of Carmel, and here I had a better opportunity of studying the last-mentioned formation, and obtained, partly through the kindness of Mr. Shümaker, the American consul here, partly by our own observations, the first fossils which we have been able to collect.

These beds are, I believe, generally supposed to be contemporary with the earliest Eocene period; but an inspection of the fossils seems, as far as my limited experience goes, to point to their being earlier, or of the chalk period. They include some specimens of *Ammonites* resembling the *A. Rotomagensis* found by Captain Wilson at Jerusalem, two kinds of *Echinus*, a fossil somewhat resembling the *Perylla* (one of the *Dibranchiata*—a sub-division of *Cephalopods*), and some very small shells, apparently of *Acephalous mollusks*, which must await examination and description by some one more competent to pronounce an opinion.

The beds in which they occur are uptilted at various angles, often almost perpendicular. They show the interstratification of the harder layers, and the side of the hill which they form has a slope of thirty-five to thirty-seven degrees, the dip being nearly coincident with the north-east declivity of the mountain.

Turning to more recent geological features, the outbreaks of basalt which, with one exception, are new discoveries, are first in importance. They are in all thirty in number, occurring in the Plain of Esdraelon, the largest being on the side of Mount Gilboa. My last report gives the principal points of interest with regard to them.

The Plain of Esdraelon is coloured with a purplish tint to distinguish it from the other small plains, because of the difference of its soil, consisting of basaltic *débris* of a rich dark colour, which occurs to a certain extent in the Merj Arrabeh, but differs from the more argillaceous topsoil of the other smaller plains.

The only remaining formations to consider are those found at Haifa, near the sea-shore, and which are quite local, and formed originally a sea beach farther inland than the present line. There are six varieties, found as follows, all being represented by a wash of light red on the map.

- No. 1. A fine shelly conglomerate, formed (as it is still forming in places along the beach) by the consolidation of small shells and water-worn fragments of shell and flint, cemented with lime, and forming a building stone of brownish colour far harder than the white limestone. Quarried near Carmel.
- No. 2. Coarser conglomerate of broken shells found on the beach.
- No. 3. Third quality, still coarser, on the beach.
- No. 4. A plum-pudding stone of flints and rolled pebbles, so hard as to be used for mill-stones by the Germans; there are



two qualities, the softer being of reddish colour from infiltration of iron in the cement. This is not found to stand the wear and tear of the upper millstone quarries near Carmel.

No. 5. A coarse breccia of limestone and flints of large size, forming a bed extending along the coast south of Tell el Semak, evidently the old shore-line.

No. 6. A sandstone consolidated by pressure, but not very crystalline. In this the tombs west of Haifa are cut.

These littoral deposits are probably not of one date, the first-mentioned being the oldest. In some of the finer, shells which are but half fossilised, retaining their white colour from the lime in their composition, appear. In other cases the shells are completely changed, and of the same colour with the stone.

The same process which now carries the light pebbles and *débris* into the bay, leaving the coarse and hard near the promontory, can be traced in this earlier formation.

The coarse conglomerate on the south-west side of Carmel denotes a period when the waves came up nearly to the foot of the mountain, and covered the sunken limestone rocks now far inland with *débris* of their own kind, forming a conglomerate now found above the lower limestone to a depth of some thirty feet; but where the force of the wind was broken by the hill, the gentle current brought in the small shelly *débris* and sand, which gradually consolidated, makes now a hard building-stone and a harder mill-stone, and which, in Jewish times, was preferred for the excavation of tombs to the broken and crystalline limestone on the sea-shore. The sandstone is in places found immediately upon a bed of limestone, which has at some time been water-worn, showing that a sandy beach was founded on hard rocks covered some five to ten feet deep.

I cannot conclude this report better than by a few words on the scenery round Haifa, the most picturesque part of the country which we have yet traversed, and an account of which may interest those who care little for the details of geology or triangulation.

We have for the last two months been living literally under the shadow of Carmel, for the long shades creep down the sides of the great flat ridge which extends for fourteen miles from the cliff on which the convent stands to the land end, where it dips down with equal abruptness, and stretch themselves over the plain of Akka at its base, so that Haifa is enveloped in shadow long before the sunset light appears on the brown walls of Akka, and the deep red flush, suddenly followed by a cold blue colour, spreads over the chain, which rises gradually into a high ridge above Safed.

The rugged sides of the ridge of hard dark stone, always steep, often precipitous, are covered thickly with a wilderness of shrubs of dark and rich green. They stream like the torrents which in a heavy winter follow the same course down the narrow wady beds; in parts the bare

rock appears, only covered with a thorny herbage; in other places all is one soft surface of thick vegetation, but hardly ever does any tree even inconsiderable size break the even outline, with the exception of the pines of small size which straggle along the watershed.

The shrubs are principally a kind of pistachio, with red berries, the sponge laurel, the hawthorn, and the arbutus, whose berries are now ripe. The barer parts are covered with the *Poterium Spinosum* (one of the *Rosaceæ*), with the cisti, or rock roses, and with flowers, of which the white-striped asphodel, the jonquil, cyclamen, red and purple anemone, hawkweed, and daisy are now in bloom. Often, too, the horses' feet press out a sweet smell of the thyme and mint which cover the chalky soil. Round Asfia and Dalyeh there are a few plantations of olives, but with this exception the only signs of life are the herds of goats climbing the sides, or a group of gazelles seen up a steep wady, bounding through the shrubs. Such is "the forest of Carmel," the "fruitful field," and such perhaps it may have been in Bible times, for there is no evidence of any great change in the conditions of climate, which should account for the growth of a forest of *trees* which will not now live on the slopes, though the rich soil still claims superiority to that of the stony plain at the foot of the mountain.

Deep in shadow as the side of the hill always is after midday, there is no lack of picturesque points of view, including the neat white German houses, and the ruinous walls and dirty tumbledown buildings of Haifa itself. A lover of colour and effect could not indeed wish for anything brighter than the red flush on the hills, and the blue and purple shadows towards sunset, whilst the ever-beautiful sea, the dim hills and line of palms on the sand-dunes, give sunrise effects most Turneresque in their appearance.

Not less striking is the view of the Kishon, backed by Carmel, which has never, I believe, appeared in any book of travels. I saw it first on a day when huge piles of silvery cumulous cloud shaded plain and mountain. The ridge of Carmel formed a dark background, the grey and silver river flowed through a flat, marshy middle distance of reeds and brown earth, and red and coppery shrubs. A single palm-tree with an old boat formed an appropriate foreground, and on the opposite side, scarce sixty yards distant, a row of solemn herons stood in contemplation, a couple of white egrets were stepping daintily about, and an osprey flew overhead with a fish in his talons.

There are several pools or streams banked up at the mouth by the sand-dunes between Haifa and the Kishon, and on the opposite side. Hither come the duck in stormy weather, and a few snipe and red-shanks can be obtained. Round one, the palms grow in profusion, and make a truly Oriental sketch. On the shore the dotterel and gulls, in the bay the cormorants, and on a stormy day even an occasional Mother Cary's chicken, may be seen; but animal life is restricted to these and to the ichneumons, which seem to exist in numbers in the sand-hills and amongst the broken tombs.

Thus I may close the report of our winter's work in Haifa. Little remains for us to finish there, and in another week or fortnight we shall be able to leave the comfortable little house in the German colony, where we have been stationed during the rough weather (what little there has been of it this year), and have met with every kindness and hospitality from the worthy and energetic little society who have here gained a footing in Palestine. We shall return to tent-life and outdoor work, and endeavour, if all goes well, during the spring to fill in the country between our former districts and the sea-shore, and attentively to examine the ruins of Cæsarea, Antipatris, Tantura, Castellum Peregrinorum, and other sites in this hitherto little visited and almost unexplored part of the Holy Land.

CLAUDE R. CONDER, Lt. R.E.,

*Commanding Survey Party, Palestine.*

## MR. C. F. TYRWHITT DRAKE'S REPORTS.

### XI.

SHAYKH ABRAYK, Dec. 9, 1872.

*Vineyard-towers (ancient).*—In reply to a question about the watch-towers mentioned in my last report as existing in the thickets near Umm el Fahm, I may say that they have all the appearance of vineyard-towers or garden-houses, but of more solid construction than those now used in Palestine. The old buildings are usually about 20ft.—25ft. square, and constructed of roughly-squared stones, measuring from 3ft. to 4ft. in length, by 18in.—20in. in depth and breadth. These are occasionally drafted with rustic boss. The door is usually very small; the roof of lower chamber, which in one instance remains, is made of blocks laid over a rude arch, which forms their central support. In no case was any trace of mortar or rubble visible. The walls were probably dry, and the crevices would allow a free circulation of air, a great desideratum in buildings such as these, intended only for habitation during the hottest part of summer. Not only amongst the brushwood here, but also in the thickets of Mount Carmel, terraces are frequently met with, showing that once cultivation extended over even the highest parts of the hills, which are now the haunt of the panther and wild boar, the fox, jackal, and wolf, which with the partridge and woodcock are seldom disturbed even by a passing goatherd.

*Aqueduct.*—Lieut. Conder made mention in his last report of an aqueduct near Saffūriyeh, of which we made a survey. A few remarks on this work may not prove uninteresting. In Jebel el Siah (collection of water) are three shallow pits which give an unfailing supply, and are

called 'Ayyun el Jinnan (the springs of the genii). Close to these, owing to the alluvial nature of the soil, the aqueduct cannot be traced, but on the hillside below El Mesh-hed it may be seen, a narrow and shallow channel cut in the rock. This winds along the hillsides for a distance of  $2\frac{1}{2}$  miles, and then crosses a small valley. Beyond this are a series of caves now broken in, through which the channel doubtless passed. A little farther on we come to traces of a constructed aqueduct. This gradually becomes more distinct, and at last assumes the form of a rubble wall 5ft. high. This wall is constructed of large rough blocks packed with smaller stones, the interstices being filled up with a hard mortar, into the composition of which potsherds and ashes largely enter.

At the end of the wall all trace of the aqueduct is lost, till we find it again a channel, 2ft. broad and 6in.—8in. deep, with an inner channel 1ft. broad and 4in. deep, cut in the rock. A little farther and we come to the entrance of a cave, which extends to a length of 580ft., with a height of from 8ft. to 20ft., while its breadth varies from 8ft.—15ft. At the west end of this tunnel the exit passage is blocked up with earth, but leads in the direction of Saffūriyeh, distant  $\frac{1}{2}$  mile, for the supply of which the aqueduct was presumably constructed. Two large *barrages* occur in the cavern, cut in the solid rock, and where necessary supplemented with masonry. In the second or western there appears to have been a lower and an upper sluice; the former through a rock-hewn passage, now stopped up with earth, and the latter through a channel of masonry on the top of the *barrage*. Square holes are cut in the roof at intervals, partly no doubt to facilitate quarrying, and partly for the purpose of drawing water. In many places, especially towards the west end, the roof has fallen in, and the original level of the floor cannot be ascertained. We found, however, a well-defined water-line, and on drawing out the sectional plan this was found to correspond with the level of the entrance and exit. The sides of the caves are lined with several coats of cement; the inner is frequently half-covered with potsherds, stuck over it while wet. Above this comes a layer of cement mixed with ashes, and on the surface a firm hard cement of a pinkish hue, from the quantity of pounded red pottery used in its composition. The roof is not plastered, and in many places natural horizontal cracks in the rock have been somewhat enlarged, the better to act as land-drains for the collection of surface water.

The whole length of the aqueduct from Jebel el Siah to the end of the cave is  $3\frac{1}{4}$  miles. The style of the work leads to the conclusion that it is Roman. There is nothing, however, to show that it is not late Jewish, constructed under the influence of contact with western civilisation.

*Caves and Tombs.*—In the rocky glen which leads down from the ruins of El Tiréh to Iksal we found a cave sufficiently curious to deserve mention. A cross cut on a large fallen lintel at the entrance shows it to have been used by Christians, and the interior arrangement seems



to point to a hermit as its occupant. The cave is mostly natural, and is situated in a spur of the hillside, in such a manner that by building a wall of masonry on one side, and a gateway (now ruined) at the end, a chamber was enclosed at the cave's mouth. The stones of the masonry are about 2ft. or 3ft. long, and 1½ft. to 2ft. deep and broad: they are filled in with rubble, and the mortar is mixed with earth and broken pottery.

A cupboard-like recess is left in the masonry, possibly to serve as a seat. The cave itself is divided into two parts: the outer is some 15ft. high at the mouth, but gradually slopes inwards like a funnel, till it ends in a doorway, 5ft. x 3ft. This was formerly closed by a stone door 14in. thick. Inside, the cave is an irregular oval in shape, and about 12ft.—14ft. high. At the far end is a small recess 9ft. from the ground, which can be reached by three rude steps. This would seem the reverend hermit's larder. On the right hand are two more natural recesses, and between them and the door a place has been hewn out which doubtless served as a bed. The floor is many inches thick with the droppings of bats. Struck by this unusual circumstance—most caves being used to shelter the flocks in the rainy season—I asked the reason of it, and was told that the cave was inhabited by a *Ghuleh* (ghoul), and that none of the shepherds dared enter. The native name is Magharet el Mat-húmeḥ.

I may observe that the tombs which occur in such number at Iksal (see Lieut. Conder's report), sunk in the rock with an arched loculus on either side, are exactly similar to those I described as existing in the neighbourhood of El Tireh and 'Amwas, on the edge of the Jaffa plain, and in Jebel el Zawī, near Aleppo. The lids, however, differ from these last, which are larger, and worked with a ridge roof and other ornaments, as is common in the case of sarcophagus lids.

From Nazareth we visited some caves at Yafa (ancient, *Japhia*), which are very interesting. As far as I am aware, they are unique in arrangement, for I have never seen anything at all like them in Palestine or Syria. The entrance to this curious place is through a small passage leading out of an ordinary cave of moderate dimensions. This passage is only about 12ft. long, and leads into a small roughly circular chamber, nearly 5ft. high, and some 12ft. diameter. In the floor of this are two circular man-holes, "joggled" round the edge to admit of a slab being inserted; these lead into two lower caves, which again communicate with a still lower story. Besides these circular man-holes there are small doorways in the walls, so that every chamber communicates with each of its neighbours above, below, or at the sides by one or more openings. These ramifications are very intricate and puzzling. My sketch-plan and section will show better than any description the style of cave.

From this peculiar arrangement I cannot look upon them as tombs, for which purpose the number of openings would be clearly objectionable. I am inclined to think they were *matamir*, or chambers for



storage of grain, &c. In that case the upper opening would be used to throw the corn in at, while one of the lower ones would be well suited to draw it out at. The stone in which they are cut is very soft, and can easily be cut with a knife. The tool used in excavation was a pick 2 $\frac{3}{4}$  in. broad. These caves were first discovered by the fellahin a few years ago, and no bones were found in them. There are, however, rude niches in the walls for lamps: these may have been used by the men who quarried them.

In the neighbouring village of M'alúl is a remarkable tomb constructed with fine masonry. The architectural details of this were sent home by last mail. The natives call it Kasr el Zír, and they say that Zír was brother to Kulayb (the little dog), and Jerro (the whelp), and that this latter was founder of the great tribe of the Beni Helal (sons of the crescent moon). Of these Beni Helal many tales are told: their original country was in Yemen and Himyar, and the history of their wars is mixed up with accounts of Abu Zayd, of mythical renown. Defeated by a Himyarite king, they took refuge in the plain of Esdraelon; and near Sammúneh some trees of *Acacia nilotica* (the only specimens I have met with in Palestine) are said to have sprung from their tent-pegs. For some reason this country did not suit them, and they emigrated to Egypt, many being slain *en route* by the Emir of Ghazzeh. From Egypt they went to Trobolus el Gharb (African Tripoli). This is the popular story, but Shaykh 'Amín, the chief Moslem at Nazareth, says that Jerro was father, not of the Beni Helal, but of the Beni Wail.

The Beni Kulayb was formerly a most powerful tribe of Arabs. I am not aware whether they still exist in Arabia, but have reason to believe that they do not. A relic of the tribe, numbering some eighty tents, may usually be found towards the south-east of the Sea of Tiberias.

At this place we have examined and made plans of a large number of cave-tombs. Some of them are of considerable extent. The only trace of inscription consists of the single word  $\pi\lambda\rho\theta\epsilon\text{N}\iota\epsilon$  scratched over a loculus, and rudely marked with red paint. The most noticeable peculiarity of the tombs here is that they have both pseudo-sarcophagi and pigeon-hole loculi. By the former I would designate those loculi which are sunk beneath an arch parallel to the walls of the tomb, and have a thin partition of native rock on their outer side; they have much the appearance of a sarcophagus placed in a niche in the wall, but having no space at either end. The pigeon-hole loculus is of the type so well known near Jerusalem (*e.g.*, in the so-called tombs of the judges), which is driven at right angles to the surface of the wall, and is usually about 7ft. long by 2ft. wide, and 3ft. high, the roof being slightly arched in most cases.

Several of these tombs have produced skulls, which add largely to my collection. No other objects except two small wide-mouthed glass bottles, with handles, and of very pretty shape, have been found in

the tombs. A coin bearing a helmeted head and the legend URBS ROMA: reverse, a wolf suckling two children; above, two stars, and below, SMHS, another coin of Constantine, together with the many fragments of Roman tiles (red earthenware) and large hewn stones, point to this place having been an important town during the Roman occupation. Just in front of our tent is a limestone sarcophagus. At one end is a bull's head in relief, surmounting a pendent garland; on one side is a tablet (without inscription) of the ordinary Roman type with two triangular ears; on either side of this are bulls' heads, and below a garland; on the opposite side are a bull's and two cows' heads, with comical semi-human faces, also with garlands beneath. A coin (of the Seleucidæ?) was picked up in the valley below us: obverse, three ears of wheat; reverse, an umbrella, and legend ΒΑΣΙΛΕΥΣ (?). A small female head, of classical type, was picked up a year or two ago near the village, and is now in the possession of Mikhart Kawwar, native Protestant priest at Nazareth.

In one of the tombs, which was found a few years ago by women digging for clay to mend their roofs with, but having been stopped up by the washing down of the soil, had again to be opened, we found a quantity of rude ornamentation in red paint, evidently smeared on with the finger. The interior of the arch, over three of the pseudo-sarcophagi, was daubed in a way similar to that in vogue amongst the Kurds and Arabs of the present day. Lines and intermediate dots form for them the acme of artistic decoration. In other places a palm branch, a rude wreath, a daub representing pendent garlands, a circle filled with cross lines and having two long curved lines terminating in something like the conventional ivy-leaf so frequent in Roman art, proceeding from its lower part, the representation of a palm-tree (?) partly cut in the rock, and a branch-like ornament with six lines on each side recurved at top, form the total of these rude attempts at decoration.

In this chamber we found the two above-mentioned glass bottles buried in the soil which covered the steps of the original entrance, now blocked up, and were just beside a closed loculus. This had escaped notice, as the colour of the plaster which covered the two stones forming its door was very similar to that of the walls. On opening this loculus we found it full of stones; these were cleared away, and beyond, a chamber was discovered also full of stones, which seem to have been thrown in from a hole in the roof. Nothing but a few bones in loculi sunk in the floor was found in this chamber. The corresponding loculus on the other side of the entrance door had been opened, and does not lead to any further excavation; hence when we first found this carefully-concealed passage we were in hopes of finding something to repay our trouble. The pseudo-sarcophagi had been covered in with slabs, over which mortar had been laid in the shape of a ridge.

The real entrance to the tomb still has its door *in situ*. It is of stone, and hung on two projecting knobs, which fit into sockets in the lintel

and sill. The walls of this cave, which is cut in very soft white stone similar to that at Yafa, are very smoothly dressed. From this cave a way has been broken into a series of ruder ones which contained nothing of special interest. These farther caves, which evidently belonged to a different tomb or tombs, were roughly dressed with a pick one-third of an inch broad. In these, as well as in all the other tombs we have found here, the pseudo-sarcophagi are more numerous than the pigeon-hole loculi; the probable reason being that the former were originally made, and subsequently, when more of the family wished to be buried in the cave, it was found more convenient to excavate a long loculus beneath the older ones than to cut a new chamber. In the immediate neighbourhood of these tombs, which occupy the hill to the west of the present village, are the foundations of three buildings. The stones are of considerable size (about 3ft.  $\times$   $1\frac{2}{3}$   $\times$   $1\frac{2}{3}$ ) which perhaps were tombs of masonry either independent of or constructed over the caves.

*Tells (mounds).* Mounds (Ar. *Tálúl*) form a marked feature, not only of the Merj ibn 'Amr, but also of the Plain of Akka and the *ghor* or Jordan valley. In this report I shall, however, confine myself to a few remarks about those in the former locality. They are artificial either wholly or in part, and are, or have been, occupied by buildings. The principal in the Plain of Esdraelon are—1. Tell Ta'annik (*Taanach*); 2. T. Mutasellim (near Lejjun; *Megiddo*, the Roman *Legio*); 3. T. Shaddúd, near *Akhrayfis*); 4. T. Sammúneh (partly volcanic, *Simonias*); 5. Tell el Kasis, and 6. Tell Kaymun (*Jokneam*). Besides these are the smaller ones of Tell el Shemman, T. el Dhahab, and Tell Thora (mentioned by the same name in old itineraries). In cases (as at 2, 4, 6) where a projecting spur at the edge of the plain has been made use of, the earth dug out of the deep trench which was cut to separate the mound from the mainland, so to speak, was used to heighten that side of the mound; the steep sides, surmounted by a wall, being doubtless sufficient protection on the plain side.

On Tell Kaymun, which is a very good example, we found the ruins of a square crusading fort, measuring forty yards each way, and containing five chambers on each side opening into a courtyard. A vault still exists at the north-east corner with a pointed roof of rag-work. A little below this is the foundation of the east end of a church with triple apse. That in the centre is circular, while the side ones are rectangular. Judging from a corbel found here, the building was used by the Crusaders, but a Byzantine capital found among the Arab graves on the plain below points to the probable date of the original building.

*Autumn weather.*—The winter rains still hold off, though the quantity that fell in October and November—the “former rain”—has proved quite sufficient to enable the fellahín to begin their ploughing. These rains produced an immediate change in the appearance of the country: grass began to sprout all over the hills, the wasted grain on the threshing-floors soon produced a close crop some six inches high.

The cyclamen, white crocus, saffron crocus, and jonquil are in full flower on the mountains, the *ballut* (*Quercus ægilops*) is fast putting out its new leaves, and in sheltered nooks some of the hawthorn trees are doing the same. The *Zemzarût* (species of Judas tree?) is gorgeous at the foot of Carmel with its clusters of lilac blossoms. These, to our notions, are hardly signs of coming winter, but the advent of numberless starlings and common plovers on the plains and woodcock in the woodlands point to rain not far distant. We hope, however, to gain our winter quarters at Haifa before really bad weather sets in. For the next two months we shall be principally engaged in completing the work done in the field since July. There are, amongst other things, some 600 square miles of country to be put on the fair plan, making in all just 1,200 square miles surveyed. These, we hope, will be ready for sending to England not later than the middle of February.

1873. *Difficulties with Natives*.—We have lately had some difficulties with the natives, which have proved rather serious. This is entirely the fault of the local Turkish Government, who are unwilling to finish any case off-hand, and thus teach the insubordinate fellahín a lesson which they would not forget, and which would secure us from further annoyance. On the contrary, each official tries to make the affair as long as possible in order to gain the more bribes. Promises of assistance have been sent us from Constantinople and Beyrout, and I hope the affairs will be satisfactorily settled before we leave Haifa.

The last ebullition of feeling on the part of the fellahín took the form of firing on one of our surveying parties, happily without effect.

*Temperature*.—There has lately been a great and welcome change in the temperature, the average of the maximum thermometer being about 75 deg., and the minimum 45 deg. in the twenty-four hours.

*Star-shower*.—On the evening of the 28th ult. I noticed a star-shower which continued for some hours. The shooting stars seemed all to fall from the zenith. There were remarkably few to the south-east and south-west, while to the north and north-west they were particularly bright and numerous.

Of late, east winds have been very prevalent, which, though dry and cool, are exceedingly trying to those who have been any length of time in the country. To new-comers they appear fresh and agreeable. So long as they continue, rain cannot fall, but as soon as the wind changes to the south-west we may expect a downpour. During the east winds the ozone papers are hardly affected, while a south-west or west wind turns them the deepest possible colour. These latter winds are a most grateful tonic, and one whose effect is immediately felt after the heats of summer.

HAMAH STONES.

HAIFA, Dec. 15.

Having lately seen my friend, the Rev. W. Wright, of Damascus, I urged on him the advisability of taking plaster casts of the Hamah



inscriptions. I have just received a letter from him saying that he has made casts of the stones (? all) under the most favourable circumstances, as he was able to wash and turn them as it suited him, the stones themselves having been bought by H.I.M. the Sultan. They are probably on their way to Constantinople by this time. Mr. Wright has most kindly offered to place these casts at the disposal of the Palestine Exploration Fund, and I am writing to him on the subject, and hope that they will reach England next month.

We are now in winter quarters, and have begun our indoor work. The house we have taken for the rainy season is one belonging to the Prussian colony, of which I hope shortly to send some account.

---

## XII.

GERMAN COLONY, HAIFA, Jan. 27, 1873.

IN a former report (*Quarterly* for July, 1872) I gave a short account of the Prussian colony at Jaffa. In face of the changes likely to come about in Palestine, these first attempts of Teutonic colonisation cannot fail to be of interest. I may preface the account of the colony with a few additional words regarding the origin of the society, and the first steps taken to obtain a footing in the Holy Land.

The elder Herr Hoffman—father of the President of the Jaffa colony—was a well-known lawyer, and a friend and admirer of Dr. Bengel. He had also great influence with Frederick, first king of Würtemberg, who made him a grant of a large tract of somewhat barren land at Kornthal. Here a colony was formed of Pietists—a sect which numbers many adherents among the simple folk of the Black Forest. After a time, however, the character of the settlement became more communistic than religious.

Herr Hoffman the younger, who had never been a member of the Kornthal community, then founded the Society of the Temple at Kirschenharthoff. Any persons who joined this society had lands allotted to them, which were bought back at a valuation if the settlers chose to go away.

After the establishment of Kirschenharthoff it was judged advisable to begin the real colonisation of Palestine. In 1862 four men came out, and after a short stay at Urtás—near the Pools of Solomon—they came to Nazareth. After many difficulties and much privation endured, they were obliged to leave the country. In 1866 twelve persons established themselves at Akhnayfis, near Nazareth, on the edge of the plain of Esdraelon. Here they lived in huts and hastily-improvised shelters, the result being that several succumbed to the climate. The rest moved on to the neighbouring village of Sammúneh, where they all fell victims to fever. In the end of 1868 the colony at Haifa was founded, and hitherto has proved much more healthy than that of Jaffa. In the



former place but few deaths have occurred, while in the latter nearly every member of the community has been attacked with fever, and no less than eighteen deaths from this cause have occurred during the summer.

The inhabitants of the colony are: men—single, 40, married, 47: 87; women—single, 32, married, 51: 83; children, 84. Total, 254. These persons occupy thirty-one dwelling-houses, to twenty of which out-houses, such as cart-sheds, stables, granaries, &c., are attached. The houses are built of a soft white, chalky stone, which is easily dressed, but hardens on exposure. This is quarried from the side of Carmel, half a mile distant. A few of the houses are built of a reddish rag-stone, quarried on the spot, and much harder than the former. All the constructions are neat and well fitted with European doors, windows, &c., forming a striking contrast to the squalid, untidy dwellings of the natives in the town and on its outskirts.

The trades and occupations are distributed as follows (the figures denote the number of men employed in each): 1 architect, 3 blacksmiths, 2 butchers, 18 carpenters (of these 4 are natives), 1 cooper, 1 dyer, 20 farmers, 1 master-mason and stone-cutter (employing 6 Germans and from 40—45 natives), 2 merchants, 3 millers, 2 millwrights, 1 painter, 1 saddler, 3 shoemakers, 2 tailors, 1 turner, 10 vine-dressers, 2 waggon-builders, 2 whitesmiths.

Of these the architect, carpenter, tailors, and general dealer or merchant are frequently employed by the natives, their work being much superior to any other procurable in the country.

The wages paid to Germans are—

Man	...	...	...	12 to 20 piasters per diem.
Woman	...	...	...	7 to 10   "   "   "
Child	...	...	...	3½       "   "   "

To natives—

Man	...	...	...	5 to 15 piasters per diem.
Woman	...	...	...	5       "   "   "
Child	...	...	...	3½       "   "   "

The total extent of land hitherto purchased is 450 acres, of arable land, which also contains 140 olive trees, and 17 acres of vineyards on the lower slopes of Carmel, near the houses. Deceived in their hopes of obtaining the grant of land promised to them by the Turkish authorities, the colonists have determined to buy such land as they require when opportunity offers. The vineyards are likely to prove successful; vines grown from a layer have produced grapes the first year. In colder climates they seldom produce before the third or fourth year. Wine has been made with considerable success.

There are two schools established here, conducted by 3 German and 1 Arabic teachers. In the upper school there are 25 boys and 16 girls; in the lower, 25 boys and 2 girls. Total, 68. In the upper school the subjects taught are, reading and writing in Arabic, English French,

and German, arithmetic, drawing, geography, history, mathematics, singing, and the study of music. In the lower school, reading and writing in Arabic and German, arithmetic, and singing. Religious instruction is given in both. The girls are taught knitting, sewing, and embroidery in the industrial school.

On the whole, the colonists have not experienced much difficulty in dealing with the natives and Turkish authorities. One of the most constant annoyances is the want of anything like a legal determination of landmarks and boundaries. Frequently when a piece of land has been bought, and the colonists commence to cultivate it, a part is claimed by the neighbouring proprietor. Annoyances such as these are somewhat difficult to surmount, especially when the "custom of the country" (bribery) is utterly eschewed.

It is proposed to increase the colony as occasion serves. The main difficulty consists in the choice of proper persons, who will propose to themselves to further the spiritual rather than the worldly aims of the society.

The site of the ancient Sycaminon has always, I believe, been placed at Haifa el 'Atikah or old Haifa, which lies on the eastern side of the spit of land projecting north from Carmel. Indications as to its site are sufficiently vague, its position in the Antonine and Jerusalem itineraries being laid down at twenty and twenty-four, sixteen and fifteen miles from Cæsarea and Ptolemais ('Akka) respectively. Haifa el 'Atikah is about twenty and ten g.m. from the two places. There is a neighbouring ruin, however, to which no history attaches, but the claims of which may perhaps be stronger. This is now called Tell el Semak (Fish-mound), and in this word the three initial consonants of Sycaminon are found; it is very possible that the Greek name having no meaning to Arab ears, has, as is so often the case, been corrupted into a common Semitic word. The traces of ruins at this place are very considerable; a tell on a little promontory forms the nucleus, around which are found innumerable fragments of marble slabs, glass, pottery, and hewn stones. This place entirely commanded the coast road, as the sides of Carmel here rise abruptly, and only leave a plain of some 200 yards in width along the shore.

Haifa el 'Atikah is said by the inhabitants of the modern town—and not perhaps without reason—to have been merely the old site of Hepha. The ruins are now covered with gardens belonging, according to tradition, to the owners of the houses which formerly stood there. One of the principal Christians told me that he was many years ago digging there—according to the usual custom—for ready-dressed building stone, when beneath the sill of a doorway the workmen found a small brass jar, containing 1,000 gold pieces, as he added, of the date of Helena. Helena's name, however, is used to imply remote antiquity, as Cæsar's and the Devil's (of Cæsar's camp, the Devil's highway, &c.) are in England. The coins were probably early Byzantine, as I have lately procured a fine gold coin of that period, found near the same spot.

Among the gardens are found some rude tessellated pavement *in situ*, and on the shore are traces of a small harbour and a mass of rubble work, seemingly of Roman construction.

About a mile and a half south-east of Tell el Semak is a wady, the mouth of which is laid out in gardens, producing vegetables, figs, olives, locust trees, pomegranates, vines, and apricots. These are watered by a spring called 'Ain el Siah, which bursts out of the hard white limestone rock, here plentifully sprinkled through with black flints in finger-shaped nodules. Below the spring is a rock-hewn tank with filtering apparatus, from which the water is led by an aqueduct into the gardens. A little higher up the wady are ruins of two massive buildings, the ashlar of which has nearly disappeared, leaving only the stout rubble, which has the appearance of Roman work, as has a broken semicircular arch. These are called the diura, or monasteries, and tradition says that the last abbot was one Thul el Serjilâui, which seems a reminiscence of Paulus Sergilius. On the opposite side of the narrow ravine is a double cave, inhabited by a fellah who owns a small garden here. This cave is called the monk's stable and Liwan. The lower cave has square recesses cut out of the rock along two sides, which are to all appearance mangers. The upper cave, which is open in front, is reached by a staircase from the first. Facing this place is a spring flowing from a small recess hewn in the face of the rock; beside it are two niches with angular tops much resembling in size and shape two *sedilia*. The name ('Ain Umm el Faruj) and appearance of this spring denote its former connection with some phallic rites, now long since forgotten.

*Weather.*—This winter there has been an unusually small amount of rain in Palestine, and unless there is a pretty heavy fall before the end of the month there will be a total want of crops in many places where they have hitherto been unable even to plough. This is especially the case in the district of Jenin and Nazareth. Further north, in Syria and the Hawran, I hear that there has been a sufficient rainfall. Up to date the raingauge shows 2.25 inches less than had fallen at the same time last year. The weather has generally been bright and clear, colder than usual, with almost continual east winds. The Nahr el Mukatta (Kishon) and Nahr Naamán (Zelus) have only lately been able (by the help of easterly gales) to force open a channel to the sea through the sandbank which closes their mouths during the dry season.

On the sand-dunes near the mouth of the former stream, I observed a curious deposit of pumice-stone, the pieces varying in size from a good-sized apple to a pea, and being mostly water-worn. This is in the inner part of the bay, whither the current brings the finest and lightest things, small sand, seaweed, and tender shells; the heavier pebbles and shingle are left farther west. The only place whence this pumice-stone can have come, as far as I am aware, is from one of the Italian volcanoes, wafted over, in all likelihood, by the west winds which prevail in summer.

CHAS. F. TYRWHITT DRAKE.

## EBAL AND GERIZIM, 1866.

ON the 6th March Lieut. Anderson and I arrived at Nablus, with the view of carrying out some excavations on Mount Gerizim, and examining the points of interest in the neighbourhood. Before, however, attempting to describe the result of our labours, it will be well to give a general sketch of the locality. At Nablus the range of hills which traverses Palestine from north to south, is pierced by a remarkable pass, running nearly east and west; on the north the pass is flanked by the range of Mount Ebal, rising at its highest point to 3,029 feet above the sea, or 1,200 feet above the level of the valley; on the south by the range of Mount Gerizim, rising to 2,898 feet. Between these two mountains the valley rises gently towards the east, to the waterparting between the waters of the Mediterranean and the Jordan, at which point there is a remarkable topographical feature which is not often met with—a recess on either side of the valley, forming a grand natural amphitheatre, the scene, in all probability, of the ratification of the law. From this point the ground falls gradually to the rich plain of El Mukhna, which runs north and south, and is bounded westwards by the steep eastern declivities of Ebal and Gerizim. Where the valley merges into the plain there are two sites of great interest—Joseph's Tomb and Jacob's Well. The beauty of the Vale of Nablus has been frequently described by travellers, and by no one more happily than by Lieut. Vandeveld, who grows eloquent on the charming character of the vegetation, the joyous notes of the numerous birds of song, the soft colouring of the landscape, and the bright sparkling streams. The latter, perhaps, more than anything else, give the vale its peculiar charm. The grateful sound of running water strikes the ear at every turn, and produces a quiet sensation of enjoyment, which is fully appreciated by the traveller weary with the dry and thirsty hills of Judæa.

Amidst this wealth of verdure, clinging as it were to the slopes of Gerizim, the mount of blessings, lies Nablus,\* the ancient Shechem; its situation, with easy access to the Mediterranean on the one hand, and to the Jordan Valley and transjordanic district on the other, marking it as a place of importance from the earliest period.

*Mount Ebal.*—The summit of Ebal is a comparatively level plateau of some extent. There is no actual peak, but the ground rises towards the west, and attains its greatest elevation near a small pile of stones. The view from this point is a perfect panorama, and one of the finest and most extensive in the country, embracing Safed, Jebel Jermuk, and Hermon on the north; Jaffa, Ramleh, and the maritime plain on the west; the heights above Beitin (Bethel) on the south; and the Hauran plateau on the east. The upper strata of the nummulitic limestone, of which the mountain is composed, are so cracked and broken, apparently by the action of weather, that the surface of the plateau, at first sight,

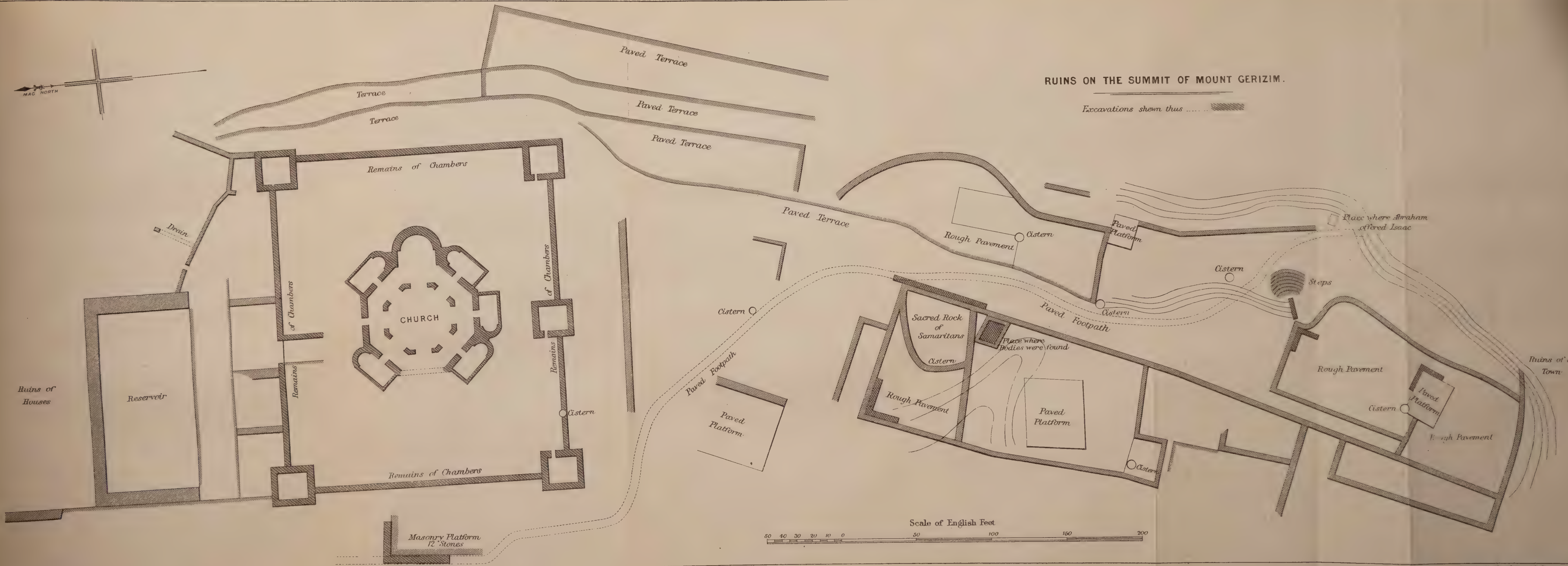
\* Photos. 95, 96.





RUINS ON THE SUMMIT OF MOUNT GERIZIM.

Excavations shewn thus .....







looks as if it were covered by a rude pavement; and it was some time before we realised that it was quite natural. Towards the east end of the plateau is the remarkable ruin called by the Arabs "Khirbet Kneeseh."\* It consists of an enclosure 92ft. square, with walls 20ft. thick, built of selected unhewn stones, without mortar. In the thickness of the wall are the remains of several chambers, each about 10ft. square, and at two opposite ends there is a projection of 4ft., as if for defensive purposes. There is a cistern within the building, and round it are several heaps of stones and ruins. Excavations were made, but without result. It is not easy to form an opinion on the object of this building; it is too small for a fortified camp, and though the chambers are somewhat similar to those in the fortified churches, the interior space, 50ft. square, is too restricted to have held a church. There was no trace of any plaster, and nothing that would enable us to connect it with the altar said to have been erected by Joshua on Mount Ebal.

The contrast between the rich vegetation on Gerizim and the barrenness of Ebal has frequently been commented upon by travellers. This arises from the structure of the rock, the strata dipping towards the north across the valley, and thus preventing the existence of springs on the southern slope of Ebal. The mountain, however, is by no means so sterile as has been supposed; for a considerable height it is clothed with luxuriant cacti gardens, carefully cultivated in terraces, and above these, to the very summit, rise a succession of terraces well supplied with cisterns, that speak of a careful system of cultivation and irrigation at a former period. Many of these terraces are well preserved, and planted in springtime with corn, which is as fine and healthy-looking as any on Gerizim. The northern slope of Ebal is rich in springs, and almost as well supplied with water as the northern slope of Gerizim.

At the foot of Ebal there is a modern Moslem cemetery, and scattered amongst the cacti gardens, and over the southern slope, are numerous rock-hewn tombs, which have been alluded to in a previous paper.†

*Mount Gerizim.*—Immediately above Nablus there are several stone quarries, and in places the limestone strata stand out in bold cliffs, which seem to overhang the town and form a peculiar feature in the view from the opposite ridge, at the point where the road to Samaria crosses it. From the top of one of these, whence escape to the mountain behind would be easy, it is natural to picture Jotham delivering his striking parable (Judges ix. 7—21).

On reaching the summit of the mountain, by the road from the fountain of Ras el 'Ain, a long narrow shoulder is seen stretching eastward to the Samaritan place of sacrifice.‡ On the north the ground descends abruptly to the Vale of Nablus, and on the south there is a more gradual slope, with no water and sparse cultivation. East of the place of sacrifice rises the true peak of Gerizim, crowned with the well-known ruins, and form-

\* See Photograph 92.

† See notes on "Tombs," *Quarterly Statement*, No. III., 1869.

‡ Photos. 125, 128.

ing the eastern extremity of the ridge. From this point a spur stretches out northwards, and partly encloses the natural amphitheatre mentioned above. The mountain is almost entirely composed of nummulitic limestone. The summit of Gerizim is a small level plateau, having its largest dimension nearly north and south. The northern end is occupied by the ruins of a castle and church, the southern by smaller remains, principally low and irregularly built walls. In the midst of the latter is a sloping rock, which is regarded by the Samaritans with much veneration; it is said to be the site of the altar of their temple, and they remove their shoes when approaching it. At the eastern edge of the plateau, a small cavity in the rock is shown as the place on which Abraham offered up Isaac. West of the castle, and a short distance down the hill, some massive foundations are pointed out as the "*twelve stones*" which were set up by Joshua after the reading of the law.

Considerable excavations were made under the superintendence of Lieut. Anderson, and the accompanying plan made of the ruins. The castle \* is rectangular, with flanking towers at each of its angles; on the eastern side are the remains of several chambers, and over the door of one of them is a Greek cross. The walls are built of well-dressed stones, which have marginal drafts, and are set without mortar; many of them appear to have been taken from earlier buildings.

The church is octagonal. On the eastern side is an apse, on the northern the main entrance; on five sides there are small chapels, and on the eighth side there was probably a sixth chapel, but this could not be ascertained, as the foundations had been almost entirely removed. There is an inner octagon which gives the plan some resemblance to that of the "*Dome of the Rock*" at Jerusalem. The flooring is partly of marble, partly of tiles, and below this a platform of rough masonry was found; in the intervening rubbish a very early Cufic coin was turned up, which had apparently slipped down through the joints of the tiles. The only capital uncovered was of a debased Corinthian order. The church is believed to have been built by Justinian, *circa* A.D. 533.

South of the castle there are no massive foundations, but numerous small walls, and amongst these are several cisterns half-filled with rubbish; a pathway of late date runs along the crest of the hill from south to north, passing in front of the "*twelve stones*," where for some distance it rests on a mass of loose stones and rubbish, in which some Cufic copper coins were found. The "*holy place*" of the Samaritans † is a portion of the natural rock dipping to the north-west, and draining into a cistern half full of stones; an excavation in an adjoining enclosure uncovered a mass of human bones lying on a thin layer of some dark substance, which had stained the rock beneath to a dark burnt-umber colour. The Amran said they were the bodies of priests, anointed with consecrated oil, but they seemed rather to be hasty interments, such as would be made in time of war.

There are several platforms of unhewn stone, somewhat similar to the

\* Photo. 90.

† Photo. 89.

praying-places in the Haram at Jerusalem; and one of these near the place at which Abraham is said to have offered up Isaac, is approached by a curious flight of circular steps.\*

The "*twelve stones*" form part of a solid platform of unhewn masonry; there are four courses of stones, and the upper, shown as the "*twelve stones*," is set back eight inches; two of the stones were turned over, but no trace of an inscription was found on them. The stone when exposed to the air is of a dark bluish-grey colour, but when newly broken it has a cream-coloured appearance.

East of the castle are the remains of three platforms, and below them on the slope of the hill are broken terraces; the platforms have evidently been built to support some building on the top of the hill, and add to its appearance; and they, as well as the "*twelve stones*," may not improbably have formed part of the substructure of the Samaritan Temple. Of the temple itself there is nothing left, but to judge from the appearance and construction of the platforms, it probably stood on the site now occupied by the ruins of the church and castle; if it were south of the castle every stone must have been removed, as the ground was carefully examined and no trace of the foundations of any large building was found.

North of the castle is a large pool, and below this and surrounding the hill on all sides are the ruins of a considerable town, to which no distinctive name could be obtained. These ruins are most marked on the southern slope,† where a portion of the enclosing town wall, and the walls and divisions of several of the houses, can be seen; the walls are of unhewn stone, set without mortar.

Near the Samaritan place of sacrifice, at the western foot of the peak, are some inconsiderable ruins, to which every one we asked gave the name which Mons. De Sauley heard, Khirbet Louzah. This Dean Stanley identifies with the second Luz, founded by the inhabitants of Luz when expelled by the Ephraimites from Bethel.

At the extremity of the arm mentioned above as running northwards from the castle ‡ is a mound, partly artificial, and isolated from the ridge by a deep ditch. There are traces of steps on the four sides leading to the summit of the mound, which was occupied by a building fifty-three feet square, having walls of great thickness. Some excavations were made, but with the exception of a few Roman coins nothing of interest was found. Below the mound on the north are some excavations in the rock, apparently for holding water.

*Scene of the reading of the Law.*—The natural amphitheatre § previously mentioned as existing at the waterparting near the eastern end of the Vale of Nablus was, probably, the scene of the events described in Joshua viii. 30—35. It may be remembered that, in accordance with the commands of Moses, the Israelites were, after their entrance in the promised land, to "put" the curse on Mount Ebal and the blessing on Mount Gerizim. "This was to be accomplished by a ceremonial in

\* Photos. 91, 127. † Photo. 88. ‡ Photo. 126. § Photo. 93.

which half the tribes stood on the one mount and half on the other ; those on Gerizim responding to and affirming blessings, those on Ebal curses, as pronounced by the Levites, who remained with the ark in the centre of the interval.”\* It is hardly too much to say of this natural amphitheatre that there is no other place in Palestine so suitable for the assembly of an immense body of men within the limits to which a human voice could reach, and where at the same time each individual would be able to see what was being done. The recesses in the two mountains, which form the amphitheatre, are exactly opposite to each other, and the limestone strata running up to the very summits in a succession of ledges present the appearance of a series of regular benches. A grander sight can scarcely be imagined than that which the reading of the Law must have presented : the ark, borne by the Levites, on the gentle elevation which separates the waters of the Mediterranean from those of the Dead Sea, and “all Israel and their elders, and officers, and their judges” on this side and on that, “half of them over against Mount Gerizim, and half of them over against Mount Ebal,” covering the bare hill-sides from head to foot. Two questions have been raised in connection with the reading of the Law : the possibility of hearing it read, and the possibility of assembling the twelve tribes on the ground at the same time. Of the first there can be no doubt ; the valley has no peculiar acoustic properties, but the air in Palestine is so clear that the voice can be easily heard at distances which would seem impossible in England ; and as a case in point it may be mentioned that during the excavations on Mount Gerizim the Arab workmen were on more than one occasion heard conversing with men passing along the valley below. It is not, however, necessary to suppose that every word of the Law was heard by the spectators ; the blessings and cursings were in all probability as familiar to the Israelites as the Litany or Ten Commandments are to us, and the responses would be taken up as soon as the voice of the reader of the Law ceased. With regard to the second point, Lieut. Anderson’s plan † of Ebal and Gerizim gives a good representation of the ground and the principal distances ; but without making a minute contoured plan of the mountain sides (a work of great labour), it is not possible to form a correct estimate of the number of persons who could be assembled within the amphitheatre. There are, however, few localities which afford so large an amount of standing ground on the same area, or give such facilities for the assembly of a great multitude.

At the foot of the northern slope of Gerizim is one of the prettiest cemeteries in the country, consisting of a courtyard, with a well, and several masonry tombs, one of which was said to be that of Sheikh Jusuf (Joseph). We were not allowed to examine the tombs, but were much struck with the care bestowed on the trees and garden within the enclosure. The place is called El Amud (the column), and the Rev.

\* *Dictionary of Bible*, art. Gerizim.

† Published in “*Recovery of Jerusalem*.”



George Williams has with much probability identified it with "the pillar that was in Shechem," where Abimelech was made king (Judges ix. 6); and with the oak of Moreh, near which Abraham built his first altar to the Lord after entering the promised land, and Joshua set up a great stone (Joshua xxiv. 26).

Jacob's well, at the eastern entrance to the Vale of Nablus,\* is covered by a vaulted chamber, round which are the ruins of a church, dating probably from the fourth century. On a second visit to Nablus in May, Lieut. Anderson made a careful examination of the well, and has given an interesting account of his descent, in the "Recovery of Jerusalem." He found the well to be 7ft. 6in. in diameter, and 75ft. deep; there was no water at the bottom, and the well was lined throughout with rough stones, being sunk in alluvial soil. According to Dr. Robinson, the depth in 1838 was 105ft. Christians, Jews, Moslems, and Samaritans, agree in considering this to be the well made by Jacob, and as the tradition goes back to the early part of the fourth century, there seems little reason to doubt that it is the same well at which our Lord met the Samaritan woman. Lieut. Anderson aptly remarks on this point that "the existence of a well in a place where watersprings are abundant is sufficiently remarkable to give this well a peculiar history."†

The small square building known as Joseph's Tomb lies a short distance north of Jacob's Well; within it we found two modern inscriptions, one Hebrew, the other Samaritan, and two vases for burning offerings, similar to those seen at Meiron. Within them were the ashes of some articles of apparel, which had recently been burnt. The tradition with regard to the Tomb is not so continuous as that of Jacob's Well. The little cemetery described above was shown to Maundrell as Joseph's Tomb, and the accounts of earlier travellers are not quite clear. Joseph, as we know, was embalmed in Egypt, and placed in a coffin or sarcophagus, with a view of his being carried by the Israelites to Palestine, and his body was probably conveyed in one of the waggons which accompanied the twelve tribes during their wanderings. The depth of alluvium at this spot, as indicated by Jacob's Well, precludes the idea that his body was placed in a rock-hewn chamber; and if this be really the site of his burial, the sarcophagus may still remain in the soil beneath the little chamber.

The town of Nablus contains many ancient remains, of which the most interesting is the principal mosque, with its fine Gothic portal.‡ A description of the town, however, with its many ruins and its numerous springs, hardly comes within the scope of the present paper, nor is there space to enter upon the history of the place, or the solution of the many questions relating to the disputed sites on Gerizim and elsewhere, such as that of the altar on which Abraham offered up Isaac, &c. These have been fully examined by Robinson, Williams, Stanley, De Saulley, and other travellers, and in the "Dictionary of the Bible," arts. Ebal, Gerizim, and Shechem.

C. W. W.

\* Photos. 131, 132.

† "Recovery of Jerusalem," page 465.

‡ Photo. 94.

## JERUSALEM.

IN a letter dated 28th February, Mr. Schick informs us that he has found portions of three aqueducts at different levels, outside the Damascus Gate, and that he hopes to be able to trace out the source from which they derived their supply of water.

The excavations in the Muristan are being continued, and a series of large tanks connected with each other, and 40ft. deep, has recently been discovered.

In the Haram Area Mr. Schick has confirmed the existence of the ditch north of the north-west angle of the platform, which was noticed by Captain Warren. He finds several walls of small stone beneath the surface, and believes the old ditch to have been arched over.

Mr. Schick has also found indications of the existence of a vaulted passage near the Golden Gate, running apparently from the old postern in the east wall towards the platform; and after a close examination of the ground near Solomon's Throne, he has come to the conclusion that there was once a tower there similar to that at the north-east angle.

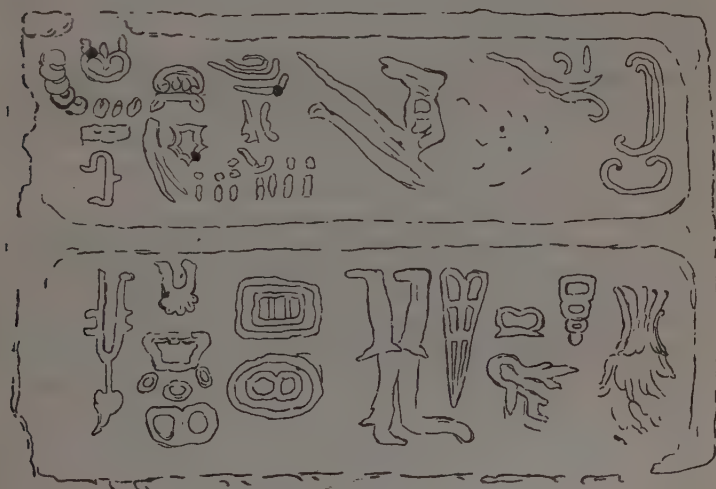
IDEOGRAPHIC INSCRIPTION FOUND AT ALEPPO,  
AKIN TO THOSE OF HAMATH.

THE attention of *savans* has been for some time directed to the ideographic inscriptions found at Hamath, near Damascus, and made known to the scientific world chiefly through the exertions of Captain Burton and Mr. Tyrwhitt Drake. When these two gentlemen were at Jerusalem in 1871, I told them of a similar kind of inscription existing at Aleppo, of which, thanks to the kindness of my friend M. Colonna Ceccaldi, I possessed a drawing made by M. Paucker, and which I gave to them to copy. It consists of two lines, containing figures whose analogy with those of the Hamath inscriptions is evident. The original stone, of basalt like those of Hamath, is embedded partly in the wall of a mosk, and partly in the hareem of an adjacent house. Only the former portion is visible, and consequently either the beginning or the end of the inscription is wanting in the above copy. Mr. Drake, on visiting Aleppo a short time after, found the stone still in its place in the mosque El Kakán; but the engraving given in "Unexplored Syria" differs considerably from the one under consideration.

The authenticated existence at Aleppo of an inscription belonging to the same system of writing as those of Hamath is a fact of considerable importance, as tending to show that these latter, whatever their origin, age, or meaning, are neither confined to one particular locality, nor to

be considered as isolated and accidental specimens. They must be no longer treated as a chance phenomenon, but as part of a regular system of writing belonging to that part of the country (*système régional*); and it is very probable that further researches in North Syria will bring to light other inscriptions in the same character.

Refraining from making any premature efforts to decipher these inscriptions, I will merely remark that the signs are very few, and repeat themselves frequently in groups, which seems to show that they belong to very simple phonetic elements, syllabic if not alphabetical. Apart from any historical interest which they may possess, these inscriptions have a special value in that they prove almost conclusively the existence of an apparently figurative system of writing specially belonging to Syria, and dating from a very early epoch, and may consequently be the means of bringing about some unexpected solutions of the problem as to



the sources of the alphabet. Without wishing so far to dispute the results at which science has already arrived as to assert that the Phœnician alphabet was entirely derived from this ideographic writing, which, so to say, died in giving the alphabet birth, one may still think that the one exercised a certain influence over the formation of the other. It is of course still a question whether this Syrian system of ideography is original, or merely an offshoot from the systems of the two great civilised centres, Egypt and Assyria, of which countries Syria was always alternately the satellite. It is possible that the Syrian ideographic system and the alphabet may have nothing to do with one another, but may both have been borrowed successively and independently from the same source at an interval of several centuries.

CH. CLERMONT-GANNEAU.

## THE HAMAH INSCRIPTIONS.

BY THE REV. W. WRIGHT, OF DAMASCUS.

THE existence of the Hamah stones was made known by Burckhardt in 1812, but not with sufficient emphasis to arouse to action English archæologists.

For the last six or seven years I have occasionally heard of these inscriptions, but seldom from any one qualified to give a correct account of them. And after one has been taken a score of times to see a wonderful inscription, which turns out to be only natural stone cracks, or at best a piece of Nabathæan, he does not feel sufficiently enthusiastic for a gallop of two or three days to verify the tale of some ignorant Arab. From all accounts I inferred that the inscriptions were only a conglomeration of wasm, or marks on stone, similar to those burnt on the camels by the Arabs. I, however, resolved to make a careful inspection of the inscriptions the first time my duty led me to the neighbourhood of Hamah. Meantime, Mr. Johnson, in the first *Statement* of the Palestine Exploration Society, and Captain Burton, in "*Unexplored Syria*," have done much to bring these important remains before the British and American public.

The copies of the inscriptions, as presented to the public, were necessarily unsatisfactory, from the manner in which they were taken. Mr. Johnson says, "We did not succeed in getting squeeze impressions, for fanatical Moslems crowded upon us when we began to work upon the stones, and we were obliged to be content with such copies of this and other inscriptions found on stones *over* and *near* the city gate, and *in* the ancient bridge which spans the Orontes, as could be obtained by the aid of a native painter."\*

Mr. Johnson seems to have seen only one of the stones, that in the corner of the shop, for he incorrectly speaks of the others as "*over* and *near* the city gate, and *in* the ancient bridge," no doubt led into topographical errors by the vague reports of the people.

Captain Burton describes the location of the stones where I found them, and where they must have been for a long time; but the inscriptions which he brought away were also the work of "the native painter." In "*Unexplored Syria*,"† he says, "the ten sheets accompanying this article had been applied to the blackened or reddened face of the four stones—one of which, it will be seen, has a double inscription—and the outlines were afterwards drawn with a reed pen."

Captain Burton, not having full confidence in the native painter and the subsequent corrections, pressed me to get squeezes for the Palestine Exploration Fund, and Mr. Drake, the able representative of that society

\* First Statement of American Palestine Exploration Society, page 31.

† Vol. I., 335. "*Unexplored Syria*" reached me without the Hamah inscriptions, so I have not been able to compare them with the casts.



in this land, knowing that my duty led me towards Hamah, urged me to get, if possible, plaster casts of all the inscriptions. Mr. Green, H.B.M.'s vice-consul at Damascus, had been also looking forward for an opportunity of becoming thoroughly acquainted with northern Syria, and to secure if possible the Hamah stones, or at least facsimiles of them.

An invitation from the Governor-General of Syria, who was on a tour of inspection throughout his province, gave the opportunity, and on the 10th November, 1872, we started from Damascus, I on a missionary tour, and Mr. Green to join the Waly.

On the second day, when in Yabroud, in our school, I secured three large ancient manuscripts of ecclesiastical legends, written on thick cotton paper. They are bulky volumes, bound in strong boards, and written in Karshouni.\*

On the 25th November we were the Waly's guests at Hamah, and the next morning early we sallied out to find the inscriptions. We had not been able to get "Unexplored Syria" before starting, and so we had to commence operations without any advantage from the labours of our predecessors.

We had first to find the stones, and that simple operation was not so easy as might seem, for everybody denied any knowledge of them at first. At last we resolved we would ask every one we met, and curiously enough, after this resolve, the first man we spoke to was Suliman el Kallas, in the wall of whose house was inscription No. I.†

The finding of the other three stones, for there are only four inscribed stones in all, not five, as in some accounts, occupied a considerable portion of the day. Meantime, while we were hunting up the stones in an independent fashion, the governor was taken to see them, and had telegraphed to the Sultan, asking him to accept them for the Constantinople Museum. As Mr. Green and I anticipated, Subhi Pasha was far too learned an archæologist not to recognise at a glance the value of the Hamah inscriptions, and far too patriotic to let them pass into the hands of foreigners. He is probably the most learned man among the Turks, and has one of the finest private numismatic and general archæological collections in the world. The Constantinople Museum is his own creation, and he was glad to secure for it these treasures. He, however, consented at once to let us have plaster casts of all the inscriptions, and promised also to bring the stones to the serai, where we could work at them at our leisure. Under other circumstances we should have experienced great difficulty in taking casts of the stones, for a series of fruitless attempts by foreigners to secure the stones had brought the Hamathites to consider the inscriptions of extraordinary value, and we heard many expressions of defiance, and threats of violence towards anybody that tried to interfere with their sacred and valuable treasures. Later on, when

\* See Rénan's "Langues Sémitiques," page 266.

† I shall speak of the stones in the same order as Burton.



it became known that the governor would take the stones, we heard men vowing that they would destroy the inscriptions.

Mr. Green and I became nervous as we saw a repetition of the Moabite stone tragedy almost imminent. We assured the men, in whose ground the stones were, that the Waly would not take them without paying more than their value, and that now that the Sultan had accepted the stones, anybody who injured them would be severely punished. We thus enlisted the cupidity and fear of the Hamathites in favour of the stones. When we informed the Waly of the danger, he put the inscriptions under the protection of Ibrahim Pasha for the night, and we warned also the city guards that dire punishment would be inflicted on them if any mishap befell the stones. They were carefully guarded that night, and on the following day the governor paid for the stones, prices varying from three to fifteen napoleons each, and they were all lodged safely in the serai.

The stones once within our reach we worked incessantly at them until we had duplicate plaster-of-paris casts of all the inscriptions. We were much delayed by the difficulty in procuring gypsum, and getting it burned and pounded, and we also had to remove from the inscriptions the dirt and fog of ages, and some of them were almost filled with lime mortar dashed into them. Several attempts also were made to decoy us from our labours, but at length, after patient hard work for nearly two days, we had the stones perfectly clean, and got perfect facsimiles of the inscriptions.

Captain Burton says "the fancy of the copyist had been allowed to run wild" in the copies which he procured; and though he says "these vagaries have been corrected," it is to be feared that some of the artistic fancies of "the native painter" may still be found in the published inscription.

I am happy to say that our casts have none of the vagaries of the native painter. They settle the first question for English archæologists, which is not, as Mr. Hyde Clarke supposes, "whether these drawings, reproduced by Captain Burton, are to be considered inscriptions or not,"\* *but whether they are perfectly correct or not.* As facsimiles they answer in the affirmative by the actual lengths of lines, and bars, and letters, and blanks, perfect even to the faults of the stone.

The removal of the stones produced a greater commotion in Hamah than will be readily supposed, and the fact of a British consul and Protestant missionary being the guests of the Waly of Syria, seemed strange and portentous in the eyes of the fanatical Moslems, but was somewhat reassuring to the cringing native Christians. Celestial portents, also, were not wanting, for on the night following the removal of the stones to the serai a meteoric shower in all its eastern splendour was seen by the Hamathites, who saw in every brilliant sparkling train the wrath of Heaven predicted against Hamah in the event of the stones ever being removed. Next morning an "influential deputation"

\* "Unexplored Syria," Vol. I., 353.

waited on the Waly to tell him of the evil omens of the night, and to urge a restoration of the stones; but the Waly assured them that inasmuch as no one was hurt the omens were good, and might be regarded as the approbation of Heaven to their loyalty in sending these precious stones to their beloved sovereign the Commander of the Faithful.

Of the stones I have little to add to Burton's description. There are four stones and five inscriptions. The stones are close-grained basalt (fully ripe, as the Arabs say) from the east of the city. Many such stones are lying about, some of them with Greek inscriptions, and some carved into the figures of animals, &c.

No. 1 is only a fragment. The lines seem to be broken across the middle, and therefore the sense is not likely to be complete. When taken out of the wall it proved to be only a thin piece broken off a large stone. The remainder of the inscription is yet to be found.

No. 2 proves, by the last line ending in the middle of the stone leaving a blank at the left side, that the inscription reads from right to left, beginning at the top.

No. 3 is the stone which was so efficacious in lumbago, that a man had only to put his back against it to be made perfectly well. This stone was very large.

No. 4 is on the end, and 5 on the side, of the same square stone, that in the corner of the shop, proving that the lines are read horizontally, and not from bottom to top and *vice versâ*, as Mr. Hyde Clarke asserts. The two faces were carefully dressed for the inscriptions, but the part of the stone most remote from the inscriptions was undressed. The stone was doubtless placed in the corner of a square building.

No. 5 has parts of the upper and lower lines defaced and illegible. This is the inscription the facsimile of which is printed in the first *Statement* of the American Palestine Exploration Society, and incorrectly described as "one of the inscriptions found upon the bridge."\*

All the inscriptions except the first are complete, barring the defaced letters. The boundaries of the inscriptions and lines are clearly defined by raised bars. The stones on which they were inscribed were very large. It took four oxen and fifty men a day to bring one of the stones a distance of half a mile. The others were cut in two, and the fragments inscribed were carried to the serai on the backs of camels. The stones were dressed narrow towards the parts on which the inscriptions were found, and the bases were undressed for several feet. Apparently they had been inserted in masonry with the dressed and inscribed parts standing out of the wall. They seem to have been intended to be publicly read, and were therefore doubtless in the vernacular of the people of Hamah.

NOTE.—The casts have not yet arrived, March 31, 1873.—*Ed. Quarterly Statement.*

\* First Statement of American Palestine Exploration Society, page 32. Burton speaks of the American facsimile as No. 4, Vol. I., page 333, though he correctly describes No. 4 as having only four lines.

## DISCOVERY OF THE ROYAL CANAANITE CITY OF GEZER BY M. CLERMONT-GANNEAU:

*From the Journal of the Paris Geographical Society.*

GEZER is one of the most ancient towns in Palestine, and was in existence prior to the arrival and settlement of the Israelites in that country. In the book of Joshua it is classed amongst the royal cities of Canaan; its king, Horam, was defeated by Joshua whilst attempting to relieve Lachish, which was besieged by the Israelites. Later, after the conquest, Gezer was included in the territory of the tribe of Ephraim, and, in fact, marked its extreme western limit. The Ephraimites allowed the Canaanites they found there to remain. The city was assigned to the Levitical family of Kohath.

It is mentioned several times during the wars between David and the Philistines, on the confines of whose territory it was situated.

During Solomon's reign one of the Pharaohs, for motives of which we are ignorant, made an expedition against Gezer, which resulted in the capture and burning of the town. So great, however, was the strategical importance of the point, that, even in ruins, Gezer was of sufficient value to form part of the dowry of Pharaoh's daughter when she became Solomon's wife. Solomon immediately rebuilt Gezer and Lower Beth-horon, which was near it.

The town of Gezer reappears, under the name of Gazara, in the history of the wars of the Maccabees. Taken by assault in the first instance by the Jews, it passed successively into the hands of the two contending parties, who attached equal importance to its possession. John Hyrcanus, the Jewish commander, made it his military residence.

In spite of the distinct indications contained in sacred and profane works, in spite even of the positive statement in the "Onomasticon" of Eusebius, that Gezer was four Roman miles from Emmaus-Nicopolis, a site well known at the present day, the town of Gezer, though sought for, had not previously been found.

Whilst running through an old Arab chronicle, by a certain Mudjir-ed-din, M. Clermont-Ganneau quite accidentally came upon the passage which led to this important discovery. The Arab historian relates that about the year 900 of the Hegira an engagement took place between Jamboulat, Emir of Jerusalem, and a party of Bedawi raiders, between the village of Khulda and that of Tell el Gezer. The latter name means literally the hill of Gezer, and the Arab name is exactly the same as the Hebrew one. As the village of Khulda is still in existence, and, according to the details contained in the account of the Arab author, Tell el Gezer was so near it that the shouts of the combatants were heard at both places, the latter locality should have been easy to fix. No village, however, of this name was shown on the best maps of Palestine. After having determined theoretically the exact position which the Arab and Jewish Gezer ought to occupy, M. Clermont-Ganneau decided upon making an excursion to test the accuracy of his views on the ground. This expedition, made under adverse circumstances, without escort or

tent, and in a desert country wasted by famine, was crowned with success. At the point which he had previously fixed upon, M. Clermont-Ganneau found the Tell el Gezer of Mudjir-ed-din, and the ruins of a large and ancient city, occupying an extensive plateau on the summit of the Tell. On one side were considerable quarries, from which stone had been taken at various periods for the buildings in the town, as well as wells and the remains of an aqueduct; a little beyond this were a number of tombs hewn out of the rock, the necropolis in which repose the people who have successively inhabited the old Canaanite city. It is scarcely necessary to add that this place is exactly four Roman miles from Emmaus-Nicopolis, and that it completely meets all the topographical requirements of the Bible with regard to Gezer.

M. Clermont-Ganneau points out the importance of the discovery with reference to the general topography of Palestine. Gezer being one of the most definite points on the boundary of the territory of Ephraim, the current views on the form and extent of that territory, as well as of the neighbouring territories of Judah and Dan, must be very materially modified. This result alone is of importance, and makes the discovery of Gezer an event in Biblical researches.

The means by which M. Clermont-Ganneau was enabled to find the town are also worthy of remark; it was by availing himself of a source which is too much neglected, the Muhammedan writings on the history and geography of Syria. This work is certainly difficult and thankless, but the example we have before us shows that it is not unproductive, and that it may lead to the most interesting and unexpected discoveries.

---

#### NOTE ON THE DRAWINGS AND COPIES OF INSCRIPTIONS FROM THE "SHAPIRA COLLECTION" SENT HOME BY LIEUT. CONDER AND MR. DRAKE.

THOUGH hastily coloured, the outline of each object has been very carefully followed, and those who saw the drawings and the originals in Jerusalem were of opinion that they were remarkably faithful representations.

Lieut. Conder states that he was unwilling to copy the inscriptions, as owing to the imperfect observation of many specimens errors might have been made which would invalidate their value if executed by one ignorant of the characters employed; but Dr. Chaplin and Mr. Drake, who were more familiar with the characters, copied carefully from the originals, or from good squeezes, those sent home.

The total number of drawings is upwards of 200. These represent all the important specimens in the collection up to the time of Lieut. Conder's last visit to Jerusalem, in October, 1872, the number of pieces then in Mr. Shapira's collection being about 700. Since then, however, the number has been increased to 1,000, and several very important specimens added, of which it is hoped to obtain drawings soon. A great number of the specimens so closely resemble one another that one or two examples are typical of each group. A large number are broken.



The drawings sent home contain specimens of each group, *perfect* ones being always taken in preference to fragmentary ones.

Among these drawings are copies of all the inscriptions yet produced by Mr. Shapira, except a few which have been sent to the office of the Fund by Dr. Chaplin. The genuineness of the inscription is warmly supported by Professor Schlottmann in the "Zeitschrift der Deutschen Morgenländischen Gesellschaft," but the opinions of English scholars have as yet been unfavourable.

*To the Editor of the Quarterly Statement of the Palestine Exploration Fund.*

SIR,—Will you allow a few topographical queries? In 2 Kings xx. 4, we read, "afore Isaiah was gone out into the middle court." In the Hebrew it is not court but *city*, מִצְרֵי. What is "the middle city"? The Sept. make it the middle *court* (ἀνκῆ), but the Hebrew is quite explicit. Some critics (Keil, &c.) make it "the central portion of the city, or Zion city," but this does not seem satisfactory. Can you give any light?

In the same book (ch. xxii. 14) we read, "she dwelt in Jerusalem in the college." This is literally "the second" (part of the city). The Sept. gives it ἐν τῇ Μαρεβᾶ, and in Nehem. (xi. 9) we read "over the second city," as it should be rendered; also in Zeph. i. 10 we have "an howling from the second city." See Keil and Delitzsch, who render it "the lower city." What is the exact meaning of these "seconds"?

H. B.

ERRATA, JANUARY NUMBER.

- P. 7, line 9, read Nablus *below*.  
     line 10, ,, soft limestone *above*.  
 P. 8, line 7, ,, from bottom, species of *truxalis*.  
 P. 9, line 18, ,, *Quercus coccifera*.  
 P. 12, line 14, ,, from bottom, *stretching below all, to the foreground*.  
 P. 13, line 17, ,, Mr. *Duisberg*.  
     line 21, ,, Mr. *Duisberg*.  
     line 25, ,, in search of saltpetre.  
     line 3, ,, from bottom, E' *Aal* (l not b).  
 P. 14, line 9, ,, Mr. *Duisberg*.  
 P. 16, line 6, ,, *found; in one piece (a disc) it occurs*.  
     line 13, ,, *low foreheads*.  
 P. 19, line 22, ,, *Rev. J. Neil* (for T. Neil).  
 P. 21, line 7, ,, from bottom, *of the third wall*.  
 P. 23, line 8, ,, from bottom, El *Tireh*.  
 P. 24, line 23, ,, El *Tireh*.  
 P. 25, line 15, ,, El *Tireh*.  
     line 23, ,, El *Tireh*.  
     line 27, ,, El *Tireh*.  
     line 7, ,, from bottom, *Haifa*.  
     line 2, ,, from bottom, El *Tireh*.  
 P. 26, line 11, ,, *Jinjar*.



THE  
PALESTINE EXPLORATION FUND.

---

PREFACE.

WE have, before all things, to call the attention of our subscribers and readers to the speeches made at the Annual Meeting, and especially the statement made by the treasurer of our position and prospects. The funds are in an unsatisfactory condition. We have the summer, an unproductive season, before us; we are pledged to carry on the Survey, which is the most important and the greatest work ever yet undertaken in Palestine; and we want to send out M. Clermont-Ganneau, for one year only, to clear up, if possible, some of the points of dispute and mystery with which the topography of Jerusalem is beset. We therefore most earnestly beg our readers to assist us, first, in forwarding their own subscriptions, and secondly, in bringing the Society before the notice of others.

As regards the expense of the Survey. It ought, with printing, publishing, lithographing, &c., and including all expenses in Palestine, except those of excavation, to be covered by about £3,000 a year. The first six months of the present year have not brought in quite half that sum. We must add to this the expenses of "management," i.e., advertising, rent, postage, salaries, &c., which are kept as low as possible, but which, with every economy, cannot be brought under £500.

Nothing could be more satisfactory than the progress of the work, and nothing more beautiful than the portions of the map already sent home. In the reports of Lieutenant Conder and Mr. C. F. Tyrwhitt Drake will be observed especially the accounts of Carmel; Athlit, remarkable especially as the site of the *Castellum Peregrinorum*, the landing-place for pilgrims; Cæsarea; the tombs of El Midyeh, supposed by some to be the tombs of the Maccabees; and

Mr. Conder's account of recent work done in Jerusalem. Among other things, Lieutenant Conder has obtained from Mr. Schick a hundred and fifty new rock levels. These, with the information already acquired by Major Wilson and Captain Warren, will enable us to produce a ground-plan of the city, which will form the most important set of data possible for all topographical questions. Mr. Shapira continues to accumulate fresh collections of inscribed pottery, of which Lieutenant Conder sends us copies. The first collection was bought by the German Government, but the opinions of the English *savants* are still unfavourable to the genuineness of the inscriptions.

The tracings of Lieutenant Conder will be exhibited at the Dudley Gallery during the months of July and August. We have here to call the attention of our readers to this exhibition, which contains, besides Mr. H. A. Harper's most beautiful collection of water-colour sketches, illustrations of the whole work of the Society.

All the particulars of the newly-found Samaritan stone will be found in this number.

Mr. Drake, who is returning to England for a short time on sick leave, was prevented from being present at the Annual Meeting through the accident of a telegram being wrongly delivered. The Survey party has been strengthened by the addition of Corporal Brophy, R.E.

The American party are now on the east of Jordan engaged in their preliminary expedition. Their party, too, has been strengthened by the addition of two assistant engineers.

---



Note. The country enclosed within the firm black line has been surveyed, and tracings of a large portion of the work are to be seen at N°9 Bull Mall East. The numbers mark the different camping grounds occupied by the surveying party. June 1873.



# THE SURVEY OF PALESTINE.

---

LIEUT. CLAUDE R. CONDER'S REPORTS.

## REPORT XII.

### THE SOUTH SIDE OF CARMEL.

P.E.F. CAMP, JEBA, 12th March, 1873.

*Survey.*—The last day but one of February found us once more in the field, and the work has, during the present month, been continued without interruption, in spite of two or three thunderstorms, which fortunately passed over us by night. The difficulty of choosing a good site for a camp, a place at once central for the work, at convenient distance from the old boundaries on the east, and from the sea on the west, and at the same time possessing good water and provender for our animals, is now far greater than in the country in which we worked last year. The villages are few, most of them are very poor, and the water brackish and unwholesome. Thus we were forced to content ourselves with our present camp, which is at the foot of the hills, rather to the south of Athlit, and at some distance from the main ridge of Carmel, which an inspection of our last tracings will show to have been the former southern boundary of the work.

The task of triangulation also requires more judgment than formerly. The ruined towers of Athlit and Tantúra would, I had hoped, have afforded standing places for the theodolite; but the first proves merely a wall and the second (also solid) has had the facing of ashlar removed as high as it could be reached from the ground, and it thus stands on a base about two-thirds the size of the upper overhanging part, where the facing could not be reached. We could therefore only observe to, and not from these points. On Carmel we obtained a very extensive view, and succeeded in bringing our observations over its highest ridge, and connecting with the points in the maritime plain. Towards the south, however, the hills are low, with flat broad tops, and differing in height very slightly. To obtain a commanding and conspicuous point was therefore impossible, and whilst choosing the best, we had some difficulty in recognising it again from a distance. Our calculations, however, show that we obtained it correctly, and the operations are altogether satisfactory.



The average size of the triangles is ten miles side, but many of the lines are twelve to fifteen miles. The triangulation extended from the new base now stretches across Palestine, from Tabor on the east to Acca, Haifa, and Cesarea on the west, and forms a good basis for extension to the hills of Safed, and to the Sea of Galilee. It will be checked by its correspondence with the old work on the east, and with the Admiralty latitudes on the sea-coast, and will finally be brought back (by June, it is hoped) to the old base at Ramleh.

The execution of the detail on Carmel is a work of more wearisome and difficult nature than any we have had since leaving the Judæan hills. Huge valleys, upwards of 1,000 feet deep, wind tortuously from the main ridge to the sea. They have to be traced carefully, as one can never predict where their next bend may carry them. Ruins appear on hills opposite to you, seemingly within easy reach, and hours have to be spent in dragging your horses down over hard, sharp, slippery rocks, through a jungle of thorny shrubs, and up another ascent of perhaps thirty-five degrees' slope before one can arrive at the site, and commence its examination and survey. Often the remains are quite modern, and ill repay one's trouble, but the thoroughness required in our work makes even these negative results valuable.

Two special surveys will also be required in accordance with our instructions, and I hope soon to be able to send home copies; they will include the neighbourhood of Athlit (*Castellum Peregrinorum*), and of Cesarea. At Tantúra, the ruins are not sufficiently numerous to require separate survey.

*Archæology.*—Besides the three principal ruined sites at the above-mentioned towns, concerning which you will hear from Mr. Drake, there are a great number of scattered remains throughout our present neighbourhood. A curious low line of hills, of which I shall have occasion to speak later, running along the sea-shore about half a mile inland, but gradually approaching as it goes north to the narrow beach, is quarried on both sides throughout its whole extent. At a distance the appearance of the rocky scarps and steps resemble the walls and flat roofs of a village, and only by the greyer colour is it possible to distinguish between the two. The hills farther inland present similar quarries, at Kh. Shih, and in two or three places on Carmel.

All these quarries are full of rock-cut tombs; at Kh. Shih, at Kh. Umm el Shukuf, and Kh. el Shellaleh, on Carmel, and on the sea-coast, at Kh. Melhah, and near Sarafend, Kefr Lam, and Tantúra, I have collected plans of from fifty to sixty of these sepulchres, the greater part being full either of *tibn*, or of bones and skulls, probably of poor passengers murdered by the natives of the villages. In these ghastly receptacles the turban or dress of a victim may often be found more or less complete.

The majority of the tombs have three loculi parallel to the three sides of the chamber, with a door on the fourth. In each group, however,

at least one with loculi running in perpendicular to the line of the sides occurs. On one we found a cross very distinctly cut. Most of the doors were originally closed by a cylindrical stone of about three feet diameter, and some eighteen inches thick, rolling back into a recess on one side. This method is well known, and its relation to the words of Scripture, "Who shall roll away the stone for us?" has often been shown. Here, however, for the first time I saw some of the stones, fallen flat in front of the doors.

In the midst of the wilderness of Carmel we came on the scanty indications of Crusading work. It is a good instance of the very little that remains of even comparatively modern buildings. From a distance we could see the walls of a ruined village known as Khirbet el Shellaleh, standing as a promontory surrounded with valleys 600 to 700 feet deep, and with steep sides, unapproachable except by one winding road. It commands the country round, though higher hills exist within the range of modern guns, and immediately suggested a Crusading site, resembling such places as Rurhmieh, and Burj Bardawil. Having at last reached it, we could at first find nothing but quite modern ruined hovels, and a quarry with two tombs. Closer inspection, however, showed some small stones with a broad shallow marginal draft, and one well dressed seven feet long, also drafted. The remains of a column built of several pieces one above the other, and of a rocky scarp, the foundation apparently of a small tower to which a flight of rock-cut steps led up, next confirmed my opinion, and, finally, a Maltese cross cut on a broken stone, and well finished, was visible, built into a modern mill aqueduct in the valley below. Putting together these slight indications, there can, I imagine, be no reason to doubt that a small Crusading castle or fortress was here hidden amongst the hills on an almost impregnable site. The head-quarters no doubt would be in the large station of Athlît, which was visible through the mouth of the wady below.

*Geology.*—The geology continues to possess some points of interest, and it is satisfactory to find the new facts agree with former deductions on the subject. The sea-wall, or low ridge dividing the plain from the shore, is a curious and interesting feature. To trace the dip of the strata is almost impossible, as the quarrying has so changed the features of the hills as to render their original form almost untraceable. The rock is a compact sandy limestone, in which, however, the sand generally predominates so much, that it might, perhaps, be called a cretaceous sandstone. The strata, or laminae, are very thin, and evidently formed at the bottom of the sea, near shore, where the sand would be constantly changing its slope, so that, as at present observed, no two laminae appear to be parallel.

The upheaval of Carmel is now traced on every side, and the dip measured in two or three places. The underlying dolomite is tilted upwards towards the main ridge, and disappears on the south beneath the softer thickly-bedded strata; these are of varying consistency, some

being hard and crystalline, but less compact than the dolomite. At one point I observed a curious vein of hard brown crystalline stone, running through the soft.

We have been fortunate in finding quite a nest of fossils on one hill top (principally gasteropods). On the road to Carmel I picked up an Ammonite; and farther south, in some dark stone are a number of bivalves. A fossil limpet, and some large kind of (?) peeten, with a broken portion resembling Gomphoceras (one of the Ammonitidæ), are also added to our collection, and generally the rock appears near the coast to be much fuller of animal remains than inland.

By far the most interesting geological feature is, however, the unexpected discovery of a basaltic outbreak, an irregular crater some five hundred yards broad, in the neighbourhood of Ikzim. It is the largest I have yet seen in the country, and close to the reported mines, which we have not yet visited, but which may prove to be a lode of copper.

The largest cave I have yet seen, apparently natural, though, perhaps, formed not by water, but by the action of pent-up gases, as suggested in other instances by Dr. Tristram, exists just north of us. I followed it to the end with a candle, and found it some twenty feet broad and high, three hundred feet long, and full of huge bats, whose rushing wings could be heard in the darkness. It contains a few stalagmites of moderate size.

*Natural History.*—The present season shows Palestine to the greatest advantage of any in the year. The plains are covered with bright green, and the dark wilderness on the hills is lit up with flowers. Of these the commonest are the red anemone, like an English poppy, and the delicate pink phlox. The rock roses, white and yellow, with a few pink ones, the cytiens in one or two places covering the hill-side with golden flowers, the pink convolvulus, marigold, wild geranium, and red tulip, are also plentiful, and several species of orchis, the asphodel, the wild garlic, mignonette, salvia, pimpernel, and white or pink cyclamen, with may in full glory, may be added to the list.

Animal life is becoming active again; at Athlit we obtained gigantic ants. The beautiful mahogany-coloured rhinoceros beetle, the venerable scarabæi, and great numbers of flower beetles, of various species, are very common. The butterflies are new, including the orange tip (*Anthocaris Cardaminsis*), the Apollo, and two species of large sulphurs, one of which I have not yet been able to obtain. The great swallow-tails, newly born, are confined to the hill tops, and the red admiral (*Vanessa Urticæ*) is less rare.

Amongst the birds the greater spotted cuckoo and a few quails are the only new arrivals. The last storm at Haifa in February brought great shoals of fish into the bay, and the gulls and a number of petrel followed them. As soon as the sea was quiet once more the sands were found covered with perfect specimens of sea shells, of which I obtained a small collection, including a beautiful little crimson peeten, and some specimens of Trochus; none but broken specimens had been observable before the storm.







## XIII.

## JERUSALEM AND EL MIDYEH.

P.E.F. CAMP, MUKHALID, *2nd May, 1873.*

FOLLOWING the suggestion lately received from a member of the Committee, I shall in future divide the report of work done from the subjects of general interest included in my letters, and place it first, to allow those who have no time to spare to follow our proceedings without being obliged to read more than the first paragraph.

When last I wrote we had again started field work, and were advancing south; we have, since leaving Jeba, camped at Kannir and Zayta, and shall in a few days break up our camp at Mukhalid, and retire into the hills, having added upwards of 360 square miles, with a monthly average of rather over 170. The triangulation is still large and well shaped, and we have been very fortunate in finding a fine point in the plain, on the top of a high tower in the town of Kakun, and a second almost as good at Kalensawye, farther south. In addition to a great number of notes, sketches, and sketch plans now added to my book, the following large-scale plans and surveys have been executed.

## ATHLIT :—

Survey of the enceinte of Athlit, scale 24in. to 1 mile.

Plans of three large vaults below the town.

Plan and proposed restoration of the church, sketches of detail.

Plan of a large tomb (possibly Phœnician) near Athlit.

## CESAREA :—

Survey of the mediæval town of Cesarea, scale 50in. to 1 mile.

Survey of the Roman enceinte at Cesarea, scale 6in. to 1 mile.

Plan and section of the remains of the cathedral.

Sketch plan of the theatre south of the town.

Sections of the two aqueducts, as laid down on the map.

## MIAMAS :—

Plan of the Roman theatre at Miamas.

Plan of a vaulted building on hill above Miamas.

## KALENSAWYEH :—

Plan, sections, and sketches of Crusading Hall at Kalensawye.

Numerous sketches and notes were also taken at Tantûra. The site of a Roman town, remains seemingly of a small temple, and a lintel with rough bas-reliefs of lions, were found at Khirbet Semmakah, on the side of Carmel, and it is supposed by Dr. Chaplin to be the site of Ecbatana, afterwards called Carmel by Pliny (*Nat. Hist.* v. 19), where, according to Lightfoot, Vespasian erected the oracle of the God Carmel; it occupies a very strong site, and a great number of oil presses are found near it.

Two inscriptions have also turned up. The first is old Hebrew, found by Corporal Armstrong and myself at Umm el Zaynat on Carmel, over a tomb now choked with rubbish. The rock is too rough to admit of a squeeze being taken, and the letters could hardly be traced, being cut

roughly and painted red, surrounded with a red border. The second was on a stone which had formed part of a tomb near the village of Belah, and was in Greek, *εις θεος μόνος* (to the one God) being distinctly visible and a date which Mr. Drake puts at 332 A.D.

In the neighbourhood of Mukhalid we find a Saracenic khan, and a group of fourteen rock-cut tombs, with loculi of various kinds; one is well cemented, and remains of ornament in red paint, circles, leaves, and lines are visible; another has a circle intersected with a cross cut in front of its entrance. There is also a very curious well, 40ft. to 50ft. deep, and perhaps 15ft. diameter, sunk in the sandstone north of the camp.

In geology I may add that we have obtained fossils which will serve to fix the period at which the upheaval of the shore line, as now observable, took place, and that we have traced the volcanic centre at Ikzim, which proves much larger than at first suspected.

In accordance with the wishes of the Committee I have visited El Midyeh, and obtained a survey of the place and a plan of the principal tomb.

Having arranged the triangulation from the Zayta Camp, I was able to spare a few days to go up to Jerusalem for the Greek Easter, and in order to look after the interests of the Fund in the city itself, returning by El Midyeh, and in time to direct the trigonometrical observations from the present camp at Mukhalid.

The talk of Jerusalem, and of the travellers then crowding in and around it, was the great Shapira collection. Since last I wrote on this subject many important events have occurred. The collection has struggled through the first stage of disrepute and incredulity, and the German *savans* have distinguished this valuable and unique series from the clumsy forgeries so common in Palestine, ranking it with the Moabite Stone and with the Hamath Inscriptions. The expedition of Pastor Weser resulted in a great meeting of the Oriental Society, who elected him a member. The famous names of Hitzig and Rödiger are now arrayed with that of Schlottman in defence of the genuineness of the pottery. Mr. Shapira has received the official position of an agent for the Prussian Government, and his first series of 911 pieces has just been bought by the Emperor himself, at a price, I believe, of over £1,000.

These events had all taken place previous to my last visit, and I could not fairly ask Mr. Shapira to allow me to copy such pieces as were already German property without permission from the owners. Fortunately, however, he has since been able to lay the foundation of a second collection, containing already over 250 pieces, of a character, if possible, more curious than those formerly found, and daily almost growing in numbers. Some of these he brought back from Moab himself during his recent visit in company with Dr. Chaplin, and as they are as yet unsold, and as he is free to sell them to any one he thinks best, he courteously allowed me to take the first sketches of the new objects, of which I copied as many as time would allow, and now hasten to send them home to the Fund.

The most remarkable of these is a great "teraph" of black pottery, 42in. long, with horns and a beard of a semi-Egyptian type, with a fine Phœnician inscription on the "stump" in front, and a second incised behind. The former contains seven lines, the latter ten. The pottery, which at first sight looks like painted wood, is of one colour throughout, the figure being hollow; it has a very curious ochre-coloured decay, which I have tried to represent roughly. The figure was broken in many places, and has been not over-correctly mended with glue.

Most of the new pieces come from new fields of research, with the Arabic names of which I will not trust myself. Those coming from one place bear a sort of family resemblance, though of the 1,100 pieces now collected scarcely one is a facsimile of another. The large goddess with a double inscription (also a terminal figure), and with seven horns, is not dissimilar to a smaller one with seven lines of inscription, and also with horns nine in number. The following, out of the fifteen objects I send home, are of most interest, next to these large figures: First, a teraph, with the two letters Yod, Wou, which if they turn out to be a form of the sacred name *Jehovah*, will be of highest interest; in this, with the exception perhaps of the calf and calf-headed deities, we find the first indication of the worship of *Jehovah* by surrounding nations, to whom, as we see clearly from the Moabite Stone, he was but the "tribe god" of the Jews, the husband of Asherah, and third in the triad with Baal and Ashtoreth, a view already learnedly supported by Lenormant in his "*Lettres Assyriologiques*."

The second is a sort of "Phoenix," or bird-bodied figure with human horned head; on the neck are seven successive marks, on the breast are five letters incised. The reading of this inscription will perhaps give a clue to the symbolism of the numerous bird-forms in the collection, and I may venture to suggest a connection with the attribute of *eternity* which we find in such deities as Hobal and Bel the ancient, the Phoenix being itself an emblem of the same.

A third is a head similar to one already sent home, with a protruding tongue, which, in accordance with the descriptions of Herodotus and of St. Jerome, we may venture to consider as a representation of Baal Peor, the Priapus of Midian.

The inscription round the base of a fourth, also a horned deity marked with the seven stars, will, it is thought, throw light on the two initials *Ain*, *Aleph*, continually occurring at the beginning and at the end of the inscriptions.

A fifth seems to be the first representation of a god of the character of the classical Pan, with a tail and short goats' horns, the legs being, however, unfortunately broken and lost.

Finally, not least interesting is No. 200, a globular vessel pierced with eight large holes, and with seven arranged in an angular form, of which five are smaller. An inscription runs round this nondescript production, and above are symbols including sword, spear, bow and arrows, a shield and two stars, with another emblem very similar to a pair of spectacles.

One fine jar I was obliged to leave, and did so all the more willingly since Mr. Drake will very probably find time to sketch it, and to make an accurate copy of the inscription.

Of the old collection there are but few important specimens not already sent to the Fund. The large figure of a goddess, with an inscription translated by Schlottman, has not, however, been copied, and is now German property, as well as one very curious figure conjectured to be a representation of Charon. The head has an unusually long nose, in each hand the demon holds a human mask, behind the trunk is what one might take for a boat, and in front are two thin legs of disproportionate length resembling oars. The figure is small, and, in common with the majority of the minor pieces, it has no inscription.

Such was the condition of the Shapira collection at the time of my leaving Jerusalem. It is to be hoped that the American expedition, now already in the neighbourhood of Heshban, will succeed in bringing fresh treasures to light.

The time of year and the late fall of the winter rains prevented my visiting, as I had hoped, the passages of the Haram, but other explorations within its precincts were facilitated by the repairs now going on within the Kubbet es Sakhras itself. I was enabled in consequence of scaffolding placed over the holy rock, to assist Mr. Schick in accurate measurements of its surface, which will correct and supplement my former sketch. I was also able to ascend into the interior of the drum, and examine the pillars for correction of my former sketches. The cornice, with an Arabic inscription, which runs immediately below the great mosaics, I was most anxious to examine, since both Mr. Fergusson and the Count de Vogüé agree that the latter are of Christian origin. I was, however, able to determine that the cornice was *structural*, and bonded into the building, and not merely a subsequent addition.

In the south-east corner of the Haram my attention was further called to the existence of a regular apse on the east side of the Mosque el Aksah; the centre has been broken away, but the commencement of the wall on either side is distinctly visible, and is marked on the Ordnance Survey. The curve of the cornice above is even better marked, and on reference to De Vogüé's plan I see that the apse is dotted in. This removes one of the great objections to the notion that El Aksah was formerly a Christian church.

We examined carefully what looked at first sight like foundations, on the platform supported by the stables of Solomon; they, however, proved in every case to be merely flagstones some eight inches thick, and there can be little doubt that these vaults are far too weak ever to have supported a structure of any weight above. The piers are, as is well known, composed of large stones drafted on one side, and evidently originally belonging to the external wall; as regards the date of the arches they support, Dr. Chaplin has lately made the valuable discovery that masons' marks identical with some used in the Muristan are also to be found on the haunch stones in the south-east corner of the Haram.



A further detail not marked on the Ordnance Survey is observable opposite the supposed springing of an arch outside the eastern wall. It is a little chamber now almost built up in the thickness of the wall.\* The north side of this opening is made of large and very well-dressed ashlar, and rests immediately on the foundation of huge and undressed stones, of which two courses are visible all along the eastern wall of the stable. This recess or opening is shown as a double window by De Vogüé, but must subsequently have been walled up, as it is now only visible through a narrow opening. A very large stone with a semi-column attached, measuring 6ft. in length and 4in. in breadth, the diameter of the column being 3ft. 4in., now lies on the floor. This very probably formed a central pier to the opening.

In Captain Wilson's account of Mr. Schick's late discoveries in the Haram the examination of the Kubbet el Khidr is enumerated. Here, however, I can claim priority, as in October last I was able to enter and examine this mosque. The fact of the floor being of rock is extremely doubtful, but immediately outside the door the rock unquestionably does appear at a level 2438.5 according to my last and most accurate measurement. At or about this level it will be found to be marked together with several other new rock levels in the plate which I sent home to accompany my October report. This level being two or three feet above that of the floor of the Kubbet el Khidr is more important for antiquarian purposes than that of the floor itself, if it should indeed prove on trial with a chisel to be the live rock also.

One of the most important points as yet not fully explored is the No. 29 Tank measured by Captain Warren, and supposed by Mr. Fergusson to contain remains of the Basilica of Constantine. On this subject I may be allowed one important remark after careful study of the appearance of the ground. It is simply *impossible* that the arch of this vault can run at the same level more than a few feet beyond the point to which Captain Warren traced it on the east, for the plain reason that the crown is but 2ft. below the level of the surface, and that on the east the ground falls upwards of 10ft. before reaching the north-east corner of the platform. Thus 8ft., or nearly the whole of the arch of the vault, would be visible at this point, were the vault continued in the same line.

Another important point indicated to me by Mr. Schick was the probable connection between the cisterns Nos. 34, and 2 on the platform, and that group on a lower level known as Nos. 12, 13, and 14. The line between No. 34 and the north side of No. 14 shows indications of two shafts now filled in, and of the top of an arch of small masonry no doubt covering a vault.

Mr. Schick's kind exertions further enabled me to investigate the whole length of the very extraordinary passage leading obliquely from the south-west corner of the twin pools of the Convent of the Sisters of Zion. It was first explored by Captain Warren, but after floating on liquid

\* This chamber is described in Notes to Ordnance Survey, page 33.



manure for some considerable time he found the roof too low to allow of his proceeding to the end. It has since been cleared by order of Joseph Effendi, Lord Mayor of Jerusalem. At the time of our visit it had but a few feet of water in it, and we were able to traverse its entire extent on planks.

The twin pools, now full of water to the crown of the arch, are below that level rock-cut on the east and west; they are reached by a staircase and by rock-cut steps from the street near the Ecce Homo arch. On the south side a rocky scarp rises above the crown of the arch, and over the street to a height about 2,456ft. above sea level; the rock from this point slopes gradually southward, and its height on the south side within the Haram is about the same on the north, but only 2,434ft. where it last appears (at a window on the west wall) above the level of the surface of the interior

The abrupt eastern termination of this great block, standing upwards of 30ft., over the Haram courts at the north-west corner, is distinctly visible on the interior, but its extent on the west is not as yet known. It is through this that the narrow passage, of which a plan is given in the *Quarterly* for April, 1872, is cut. It runs nearly straight till opposite the window already mentioned, which is at a distance of 100ft. from the north-west corner, and on the west Haram wall. At the commencement the passage, which averages some 4ft. in width, is 20ft. high, and entirely cut in rock, through which the rain water from the surface percolated. The roof is formed by huge flat slabs placed from rock to rock, in the sides are passages or weepers to facilitate the collection of the water, and in the bottom a small water channel, not occupying the whole width of the passage, is visible. At about a quarter of the whole length from the entrance a dam 9ft. high is placed, resembling exactly the two dams in the reservoirs planned by me at Seffuryeh; it has a hole below, through which the water could be let out as required. From the farther end, where the total height of the passage is only some 7ft. or 8ft., it runs on at an angle and reaches the west Haram wall at a level 22ft. below the interior surface; this part is built in small masonry, and only the lower part is of rock; the flat slabs are still visible above, and from the wall springs a nicely finished arch of small stones; the channel is evidently (as at present built) later than the wall, and ends suddenly. The true original direction of that part which is rock-cut it is impossible to determine, as it stops abruptly before reaching the wall.

The examination of the Haram wall at this point is of considerable interest, for judging from the height of the rock in the passage there can be but few courses below those visible, and these have every appearance of remaining *in situ*. The stones are 4ft. 6in. high, well finished, and tolerably well preserved, with a draft 3in. wide at the side, and 6in. above and below: the reason of this difference being that each course, as far as one can judge from only seeing two joints, was set back 3in. or 4in. from the one immediately below it. The same feature was observed by Captain Warren in his excavations near the north-east corner of the Haram at about a corresponding level.

Just before reaching the turn in the passage, and opposite the window in the Haram wall, a way has been broken through at right angles to the passage, and the chamber in which the window is can be reached through the floor.

This point is also one of great interest, as the wall is again visible. The south side of the great scarp is here traceable from the Haram wall to the passage, and forms the north side of the chamber. The Haram wall here about the level of the interior is of masonry similar to that already mentioned, and the courses are stepped back in the same way.

But at the level of the ground on the interior the wall is made thinner by a bevelled set-back, leaving two buttresses 4ft. 9in. thick at intervals of 8ft. 9in. This arrangement has been observed at Hebron, and in the remains east of the Church of Holy Sepulchre, but has never before been found in the Haram. The courses of the buttress are all flush. The lintel of the window is one large block, resting on the south side on the courses of the wall, and on the north side on the rock of the scarp.

I was also able before leaving Jerusalem to obtain from Herr Schick the long-promised plate of rock levels throughout Jerusalem. It shows the exact position and depth below the surface of the rock in upwards of one hundred and fifty new places. Combining this with Captain Warren's careful observations, I shall be able to produce a ground-plan of the natural site of the city, which will form perhaps one of the most important set of data for the study of the ancient topography which we can hope to obtain. It must not be forgotten that to Mr. Schick belongs the credit of this most useful and necessary basis for future exploration.

Leaving Jerusalem once more, in the company of Dr. Chaplin, we proceeded by Upper Bethhoron to El Midyeh, of which, in compliance with the Committee's directions, I send a short account with a Gin. survey of the site and a plan of the tomb.

In the January *Quarterly* for 1870 will be found (p. 245) an account of the place by Dr. Sandreczki, who first identified it with Modin, and the curious building with the seven sepulchres erected by Simon Maccabeus for himself, his parents, and his four brothers (1 Macc. xiii. 27; Antiq. xiii. 6). The requisites of the two accounts are, a view to the sea, seven tombs "one against another" with surmounting pyramids and a cloister surrounding them. These, as he points out, are all fulfilled at El Midyeh. My sketch will show how the sea, and the long line of sandhills, with the olive groves of Ramleh, and the white minaret of Lydd, are visible above the line of lower hills immediately west of the spot.

A further account of explorations carried on in that year by M. Victor Guerin will be found in the June number of the *Quarterly* for 1870. After clearing the *débris* the tomb was opened, and, as we were informed by the inhabitants, bones and other treasures, including perhaps the tessellated pavement which formed the flooring of the chamber, were carried away to Jerusalem.

The condition in which the monument was left in consequence of these excavations was not over favourable for subsequent examination.

#### EL MIDYEH.

This is a large Arab village, standing on a hill, and defended on the north, south, and west by a deep valley. Immediately south of the present town is a round eminence with steep and regularly sloping sides, suggesting immediately an ancient site, but showing nothing in the way of ruins except a few stone heaps amongst the olives which cover its summit. The ground on the west side of the deep wady, which has the modern name Wady Muláki, is, however, much higher, and closes in the view of the sea. It is here, about half a mile west of the village, that the Kabur el Yahud, or "Tombs of the Jews," were found, close to a modern white tomb house, with a spreading tree beside it, the resting-place of Shaykh Gharbawi Abu Subhha. My survey and plans give the necessary details, and I will only add a few observations to explain them. The sepulchres, which are fast disappearing, seem to have been seven in number, probably all of one size, lying approximately east and west, and enclosed by one wall about five feet thick. This is well preserved on the east and west, but has disappeared—or was removed by M. Guerin—on the north and south. Of the walls of partition, however, only one can be well traced, consisting of stones well dressed, laid with continuous horizontal and irregularly broken vertical joints, without any trace of drafting, and varying from 2ft. to 5ft. in length, their other dimensions being about 2ft.

The most northern is the only one of the chambers which is sufficiently preserved for examination, and differs entirely from any sepulchral or other monument I have as yet seen in the country. It consists of a chamber open on the north, nearly 8ft. high, 6ft. from east to west, and 5ft. from north to south. Its only remarkable feature is a cornice the profile of which is a quarter circle, which is evidently intended to support a greater overlying weight than that of the flat slabs some 6ft. long which roof the chamber in. The floor was also of flags supported by a narrow ledge on all sides; these having been removed, the tomb itself could be seen below, a square vault of equal size with the chamber, and apparently 3ft. 6in. deep, though the *débris* which had filled it on one side may have prevented my sinking down to the floor itself.

The pyramid which once surmounted each of these chambers has entirely disappeared; its only traces were the supporting cornice on the interior, and the sunk centre of the upper side of the roofing-slabs, which were raised about 6in. round their edge for a breadth of 1ft. to 1ft. 6in. The base of the pyramid must have been a square of 8ft. or 9ft. wide (it is not possible to determine it exactly), and the height would therefore probably have been 15ft., or at most 20ft. Of the mosaic pavement to the tomb, and of the ornaments of its walls, I was not able to find a single trace.

The surrounding cloister has also been destroyed, but on the north and west a few courses of a well-built wall were visible in parts, parallel to the sides of the tomb, about 20 paces from its outer wall. Within this enclosure was a choked-up cistern, and without, farther down the hill, a rough cave 22 paces by 14, used as a cattle stable, and full of soft mud.

Immediately north of the tomb are remains of later buildings of small rough masonry with pointed arches. They are ruined houses according to the account of natives of the spot.

The name Khirbet Midyeh will be found on the map as applying to a set of rock-cut tombs about a quarter of a mile south of the Shaykh, and these are described by Dr. Sandreczki at some length. They are separated by a slight depression from the "Kabur el Yahud," and between the two, as shown in my 6in. survey, there is a well and a couple of ruined and broken cisterns. The Doctor enumerates about twenty-four tombs; of these I observed twenty-one, and a large one with two entrances, twenty-three in all. It is possible I may have missed or forgotten to show one. The tombs resemble exactly those formerly described in the large cemetery at Ikzal, but are smaller. They consist of square chambers sunk about six feet in the flat surface of the rock, with a loculus parallel to the length of the shaft on each side, cut back under a flat arch, as shown in the sketch. A large block of stone closes the tomb above; all had, however, been pushed slightly to one side, leaving the interior, which in one case was occupied by the body of a poor native woman but lately placed there, distinctly visible. At first I imagined that they all pointed east and west, but one it will be noticed is at right angles to this direction. Nine of them are placed in one roughly-straight line, and four others parallel. They were all very small. The loculi cannot be more than 5ft. 6in. long, and the stones above are not much over 6ft. 6in.

As continually happens, a tomb of another class exists in the immediate neighbourhood. South of the nine tombs the rock is scarped perpendicularly to a height of 5ft. for over 30 paces, and on the west a square chamber with rock scarps on three sides six paces in length is thus formed. It was probably once roofed over, but no traces of masonry remain; it is filled with rubbish, and on the north and west the tops of two small entrances to chambers are visible; I could not, however, find any corresponding door on the south. A chamber of this kind exists in two or three places near Haifa, where the side entrances lead to tombs with loculi perpendicular in direction to the walls. Similar loculi occur at El Tireh, in connection with tombs *sunk* like the majority of those at El Midyeh. In fact the mixture of three or more classes of tombs in one cemetery is common throughout the country, and the chambers in question, if once the *débris* were removed (which would hardly repay the trouble), would very probably prove to have the Jewish loculus.

The wine-press mentioned in the former Report I visited and measured; it is not equal to other specimens I have copied. East of the



cemetery the rock is much quarried, and there are a few sunken square places resembling unfinished cisterns, or the commencement of a system of new tombs.

There is not, as far as I am aware, any other feature of interest to mention at El Midyeh.

Some account of the ruins at Khirbet Semmakah, the only place on Carmel where remains of any importance exist, will no doubt prove interesting, especially if, as already discussed, it seem likely to be the site of Ecbatana or Carmel.

The statement of Lightfoot is not, however, received by Dr. Thomson, who quotes Tacitus ("History of Vespasian," p. 410) to show that the God Carmel was worshipped without a temple, in the open air, on the top of the mountain, and probably at El Mahrakah, the place of Elijah's sacrifice.

That Khirbet Semmakah is the site of a town, and to all appearance of a Roman town, there can be but little doubt. After wading through the almost impassable brushwood which lies on the lower slopes of Carmel, we came upon a small plain or broad valley with a gently sloping hill at its northern boundary, whilst on the east and west the sides were steeper, and impenetrable for horse and man.

The ruins lie scattered over an extent of rather less than a quarter of a mile, principally on the sides of the hill, and but few were found on the top. On the northern side a very deep and precipitous ravine, in which the vultures, crows, and hawks were wheeling slowly, closes in the site, and renders it impregnable in that direction. The name is Wady Nahel.

The principal remains are those of what would seem to be a small temple, having a bearing of 87°. Only the lower courses of the eastern wall, and two pillar bases 2ft. 3in. diameter, are left. The doorway, which is slightly north of the northern pillar, was 5ft. 3in. wide, and surmounted with a lintel with simple mouldings. This had fallen within the building, and the upper part of the jambs with corresponding mouldings had also disappeared. The stones of the wall were ornamented with drafts, one being 5ft. in length, and so cut as to appear like two stones with the centres raised, and drafts 3in. broad and about 1in. deep. Other drafts were 7in. broad and 1½in. deep. The faces of the stones were in all cases dressed, but the deeper drafted ones were rough.

Immediately east of the temple the town wall, or some similar structure, was traceable for about 50 yards, and consisted of small well-cut stones, about 1ft. long and 6in. high; several other walls joined on to this at right angles, and on one of these, close to the temple, was a stone seeming to have been originally a lintel, but now placed in the wall. It was 7ft. long, 3ft. high, and ornamented with a tablet on which in bas-relief were two lions roughly executed facing one another, and with a cup placed between their paws. A second smaller cup was cut above the left-hand lion's back. The whole of the masonry, though small, was



well dressed, and far superior to modern Arabic workmanship. Unless, indeed, which is unlikely on account of the bas-relief, they should be Jewish, there is no date but that of the Roman occupation to which to ascribe these ruins.

Continuing our search we found a well within the town wall, and a cave without. At the south-west corner of the hill is a strong corner foundation, which seems to belong also to the outer wall, and farther north the ground is strewn with broken stones and fragments. A very low valley here separates the ground and runs south, on the east of its course, and directly north of the temple two caves appear, one possibly a rough tomb. To the west also there are several remains. These include a fine beehive cistern, about 30ft. diameter, foundations of good-sized and well-proportioned stones, and a large sarcophagus lying on the flat rock, 8ft. in length, and with a flat lid beside it.

Still farther west is a smooth platform of rock, in which a square birket, 10ft. side, and a well now partly choked, 3ft. diameter, are found.

The most characteristic feature, however, remains to mention. In every direction one finds foundations of little buildings about 20ft. square, near which lie one or more (generally a pair) of rollers, cut out of soft limestone; they are 7ft. long and 3ft. diameter, and have grooves sometimes running the entire length, but generally arranged in four lines parallel to the length of the pillar, with four or five grooves in a line. Of these I counted upwards of a dozen. They are supposed by Mr. Drake to be rollers, moved by handspikes, and placed end to end in the buildings, which he takes to be oil mills.

It is needless to add that I made a rough special survey of the place, and plans and measurements where required.

A doorway, similar in some respects to that of the temple, we found afterwards at Khirbet Baydus, south of Kannir; but in this case lintel, jambs, and seemingly the ground sill, were all cut out of one piece of very hard creamy limestone with fossils. No other ruins of the same date, except a pillar stump, a rough cave, and some blocks of a wall, existed near it. There were, however, ruins of more modern character.

In concluding this report I wish to say a few words as to the geology of central Palestine, the thorough tracing of the centre of basaltic eruption at Ikzim having explained a great deal which must formerly have been puzzling.

In Report VII. I spoke of the formation of the great Plain as due to volcanic action and subsequent denudation, and of the low synclinal dipping upwards to the basaltic centres at Shaykh Iskander and on the Gilboa range. The subsequent discoveries confirmed this statement, but it was not till after leaving Jeba that I was able to grasp the whole geological formation of the country. The sudden upheaval of Carmel, with its abrupt sea and land ends, must strike all observers as requiring explanation, as well as the low, flat character of the range forming the western boundary of the great Plain, between the peak of Elijah's sacrifice and the cone at Wely Iskander's tomb.

The Ikzim centre explains all this. The low ridge just mentioned, of soft limestone with flints, with a yet softer marl below, dipping gently down towards the Maritime Plain, and known by the modern name of "Belad el Ruhah," presents the natural surface of the country. On the south this is broken by the outburst of basalt and other trappean eruptive rocks at Shaykh Iskander, which, in their attempt to escape, have tilted the strata at an angle of upwards of 30 degrees, and have brought to light the underlying dolomite, from above which the softer formations are now washed off by subaerial denudations. On the north-west the Ikzim outbreak has entirely broken up and altered the surface of the country, and finally the appearance of a trappean outbreak near Umm el Zaynat, and of a large cavern, perhaps formed by pent-up gases, on the slope of Carmel, together with its steep sides and the direction of the dips, leads one inevitably to the conclusion that the great elevation of the range is due to the violent internal action of igneous matter, unable to find more than a very partial outlet for escape. The dolomitic rocks and the fossiliferous limestones of Carmel are at a higher level, but of an older formation than the soft marls of the "Belad el Ruhah," and thus it appears as though the effect produced on the part where no escape was possible was far greater than where, as at Ikzim, the basalt found an easy outlet.

On leaving this centre to the north the plain of Sharon suddenly widens to a more than double breadth, and the gradual slope of the hills contrasts markedly with the inland cliffs north of the Zerka. We now approach again the Judæan range, which is said generally to present a low anticlinal, an assertion which it requires numerous and careful observations to prove.

Another point of great geological interest is the date of the upheaval of the shore line, and on this also we shall now be able to throw light, in consequence of a valuable find of fossils at Khirbet Dustray, near Athlit, on the curious *sea-wall* or line of low inland cliffs of sandy limestone, in which, as explained in my last report, the tombs and quarries are so constantly found.

Advancing south of the Zerka we find this line to run gradually farther inland with the widening plain, and after passing Cesarea a second line of cliffs begins to rise close to the beach, attaining a height of 200ft. near Mukhalid, and running on continuously to Jaffa. Thus it seems as though two succeeding periods of upheaval might be expected, giving shore lines some four or five miles apart. It appears also that this upheaval has a very gradual dip upwards towards the south, but further observations near Acca will be necessary before advancing any theory on the subject.

From such a study of geology in a country so interesting as is Palestine, one is led to the conclusion that volcanic action throughout its whole extent from Dan to Beersheba, must have been very violent and continual, and I look forward with great eagerness to the thorough examination of the Ghor, which may perhaps prove to owe its formation

neither to a fault nor to glacial or fluvial action, but to a sudden volcanic convulsion not impossibly at a late geological date, which one cannot but connect in one's own mind with the overthrow of Sodom and Gomorrah.

CLAUDE R. CONDER, Lieut. R.E.,  
*Commanding Survey Party.*

---

## MR. C. F. TYRWHITT DRAKE'S REPORTS.

### XIII.

CAMP JEBA, *March 12, 1873.*

OUR present camp is pitched at the foot of the western slopes of Carmel, some three miles south-east of Athlît. The ruins of this place seem wholly Crusading, and I shall forward an account of them as soon as we have examined them. A remarkable natural feature is observable near the coast; commencing in sand dunes about three miles south-west of Carmel convent a ridge runs parallel to the mountain of that name, gradually increasing in regularity and in hardness of rock, till, between Athlît and Tantûrah, it assumes the form of a rocky ridge 40 to 50 feet high, and some 300 yards broad. The stone is a soft crystalline limestone, almost resembling a sandstone. Between these two last-named villages is a plain stretching westwards from this seawall to the sea, and protected from inroads by the peculiar manner in which the former has been quarried. For many miles the whole surface of this ridge has been cut and quarried to a depth of from six to ten feet. In many places a narrow ridge or crest has been left on the summit, thus forming a wall of living stone. Passages have in several places been cut through the ridge, and show traces of having been closed by gates. Rock-cut tombs, as described by Lieut. Conder, are numerous in these quarries, and must, I imagine, be ascribed to the early centuries of the Christian era. Our present state of knowledge, however, with regard to the rock-hewn tombs of Palestine, owing to the almost total absence of inscriptions or any other guides, renders all attempts at fixing the date of these excavations uncertain.

Besides the road passages above mentioned, one water-drain has been also found cut through the rock. In several places, too, we have come across old chariot roads with deep ruts in the rocky surface.

The present village of Tantûrah is situated about half a mile to the south of the ruins of old Dor or Dora. The remains of these ruins—for as usual all the dressed stones have been dug up and carried off—cover an oval mound comprising several acres and adjacent to the sea. The most prominent object is the remains of a tower of Crusading or early Saracenic construction. The part still standing is the north-east

buttress of a square fort on a spit of land running into the sea. A pointed arch gives the clue to its date; part of a well staircase may still be traced. The ashlar stones are about three feet by two feet and one and a half feet thick; mortar, full of cockle shells, layers of rubble, and old Roman bricks, form the interior of the walls. North of this, and supporting the cliffs, are walls of Roman work, formed of stones some four feet by two feet and two feet thick. Foundations as of a kind of wharf still remain at the water's edge. This massive masonry has been lined throughout with a coat of rubble and cement to a thickness of about two feet, for what purpose I am unable to say. Above these substructures, and immediately facing the sea, are the *débris* of a large number of columns two feet ten inches in diameter. The capitals are a kind of Ionic not unfrequent in the Hawran, and of which I have given an example found in the 'Alah in "Unexplored Syria." The volutes are formed on each side by the junction of two cones attached to the capital, an example of which measured four feet four inches by three feet four inches at top. The building to which these columns belonged must have been a conspicuous object from the sea. To the east of the mound is a Roman tank for irrigation, differing from those I formerly described near Jaffa as being built of rather large blocks of stone. Near this are a few gray granite columns. The sea-coast here is fringed with low rocks and indented with little bays which, protected by a few small moles, would still serve, as they doubtless did under the Romans, as harbours for coasting craft.

Throughout all this neighbourhood the rock-tombs above mentioned are much used by the fellahín to stow away the bodies of murdered men who, not having died *en règle*, cannot be buried in a Mohammedan cemetery. In two caves near Sarafend I counted sixteen skulls, near Athlît as many, and frequent solitary cases or groups of two or three are found scattered about. A native of Athlît to whom I first applied for information, said, "Those are the bones of men killed about here," and seemed to think it the most natural thing in the world that if men went along the high road they should come to such an end.

Turning to the pleasanter subject of Mount Carmel we find its steep sides and rugged wadies still covered with a growth of brushwood which shelters the usual wild animals. Many ruins are scattered over the hills, some ancient but many of recent date. Till the advent of Ibrahim Pasha the Druzes were very powerful in Carmel, and owned many villages. All of these, with the exception of 'Asfieh and Dáliyeh—the former half Christian—are now deserted. At a river called Semmákah a large number of columns have been found and will be described on a future occasion.

The weather is peculiarly unsettled and disagreeable, as well as far from healthy. The wind is continually changing, though blowing more from the east than from any other quarter. During the last few days haze and mist have frequently occurred, and there is seemingly every probability of an early and unusually hot summer. The cereals are

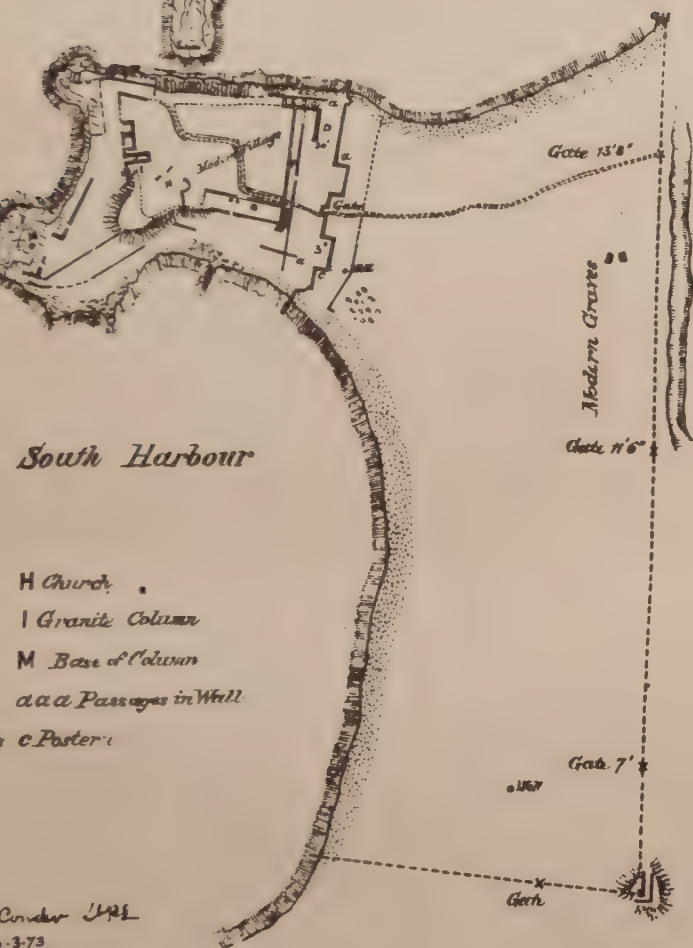




# 'ATHLIT

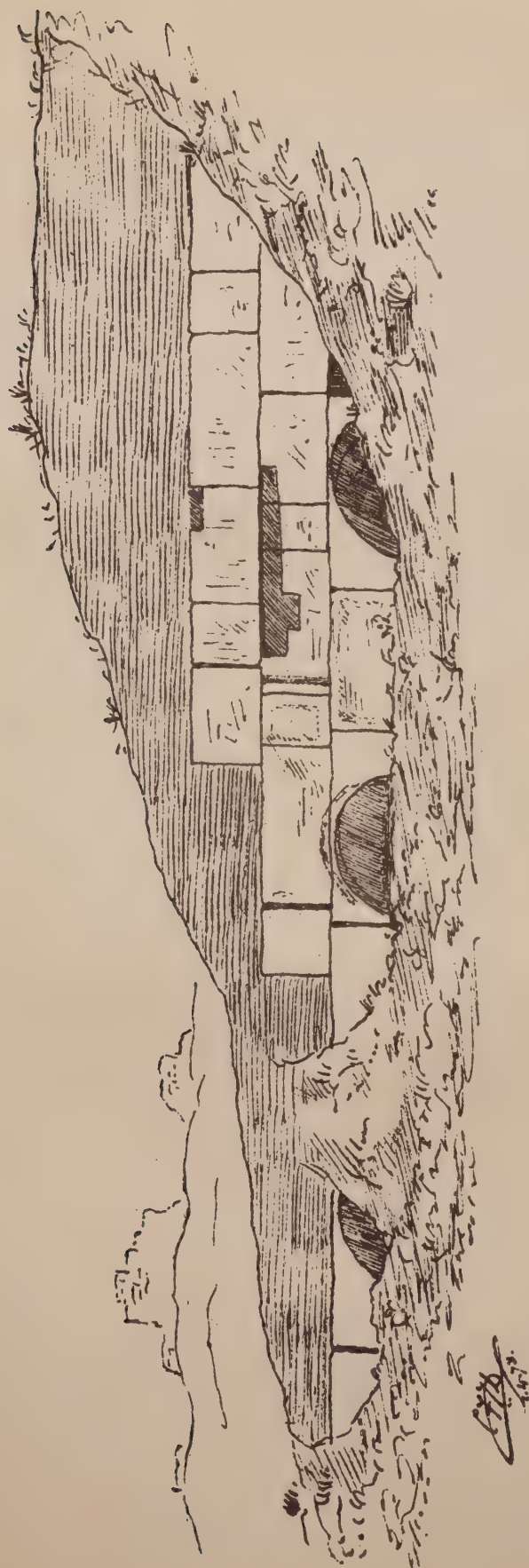
Scale 1:100

North Harbour

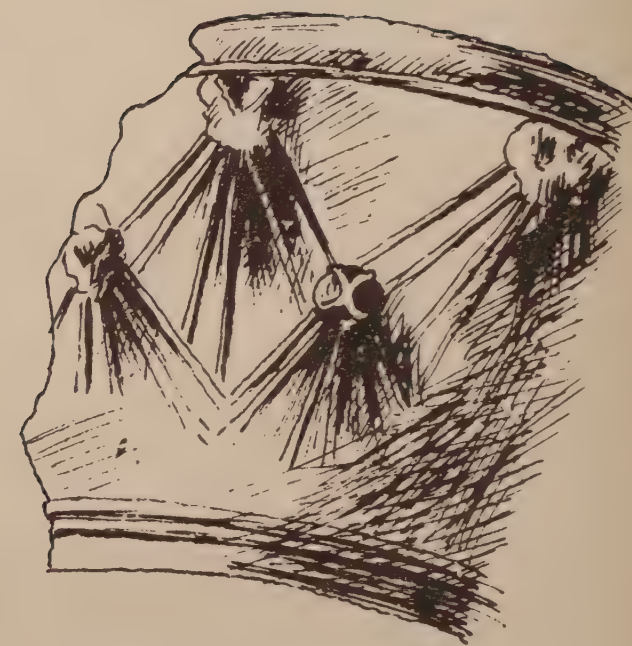


- A S.W. Outer Tower
- B Vault & Cistern
- C N.E. Outer Tower
- D B.L. Kitchen
- E, F, G, J, K, L, b. Vaults
- H Church
- I Granite Column
- M Base of Column
- a, a, a Passages in Wall
- c Postern

Surveyed by  
Claude R. Conder 1881  
20.3.73



REMAINS OF TEMPLE BUILT BY HEROD AT CAESAREA.



Broken Capital from the Church.  
'Athlit.

well up and barley has been in ear, on the maritime plain, for more than a week.

The following are a few of the identifications of ancient sites which I had begun to work out in our winter quarters at Haifa when sickness prevented their completion. As far as I can ascertain these proposed identifications are new.

יֶתְלָה. *Jethlah* is mentioned (Josh. xix. 42) as a town of Dan, and seemingly in the neighbourhood of Ajalon (the modern *Yalo*). There is no Arabic name that I am aware of which exactly corresponds to the Hebrew, but here the reading of the LXX. Σιλᾶδ may perhaps help us. If that be correct the modern village of *Shilta*, which lies a little north-west of the lower Beth Horon, may perhaps represent *Jethlah*.

חֶלְקֶת הַחֲזָרִים. *Helkath Hazzarim* is mentioned 2 Sam. ii. 16, and is translated in the marginal reading "the field of strong men," and we are told that it was a place in Gibeon, the modern El Jib. Close to this village is a broad smooth valley called Wady el Askar, meaning the "vale of the soldiery," which may not improbably be a reminiscence or translation of the Hebrew name.

The town of *Asher* (Josh. xvii. 7) has been identified with *Yasir*, but the modern *Asirah* seems a somewhat more probable identification.

In Josh. xxi. 25, and the other parallel passage, 1 Chron. vi. 70, we find mention of *Aner* and *Bileam* in the one, opposed to *Tanach* and *Gath-rimmon* in the other.

By some אֲנִי *Aner* (cf. Dict. Bible, s. v. *Aner*) is supposed to be a misreading for *Tanach*, but may, I think, be recognised in the modern village of *'Anim*, in which rock-cuttings and other traces of an ancient site are observable.

בִּלְעָם. *Bileam* (1 Chr. vi. 70) is doubtless the same as *Ibleam* (2 Kings ix. 27), which being near the going up to Gur seems to have been beside a well-known road, and in the direction of the "garden house," which is usually taken to be *Jenin*. The principal road through Palestine now runs up the wady behind *Jenin*, and here are the ruins of *Bel'ameh*, which is the same word as *Bileam*, and the position of which seems also to answer the requirements of the case.

The *Rabbith* of *Issachar* and *Amad* of *Asher*, may perhaps be identified with the modern *Arrabeh* and *Umm el 'Amid* respectively, but the notices in the Bible seem too vague for any certain decision to be arrived at.

---

#### XIV.

P.E.F. CAMP, KANNIR, March 23, 1873.

EXAMINATION of the ruins of *'Athlit* showed us the remains of a Crusading fortress, which in its palmy days must have been equal, if not superior, to anything else of the same period in Palestine proper.

It is now a broken relic, shattered by earthquakes, systematically spoiled and robbed of its stones by the Turkish Government to rebuild Akka; and disfigured by the mud hovels of the fellahin, built over it like the mud nests of the wall bees over Egyptian temples. Abandoned by the Crusaders in 1291, A.D., nearly six centuries of neglect and dilapidation have been unable to destroy the massive walls; whilst the extensive vaults, protected by their situation, are perfectly preserved. To select this as the *castellum peregrinorum*, or landing-place for the pilgrims, was a stroke of policy on the part of the old knights. They well knew the influence of first impressions, and knew the advantage of bringing men—many of whom they hoped would remain under their banners to fight on the sacred soil itself—to a prosperous well-built fortress, situate in a pleasant fertile district, rather than to a point whence the barren nakedness of the central and eastern hills would too soon be brought in view, lighted up by the pitiless glare of an eastern sun. The woodclad steeps of Carmel and her fertile maritime plain would have a homelike look to one coming from mid or southern Europe, and would do much to recommend the spot to pilgrims after long and weary travel by land and sea.

The town of 'Athlit occupies a low rocky promontory, having a small bay both to north and south, which would serve as harbours according to the direction of the wind; that on the north being protected from the south and south-west, and that on the south from the north and north-west. On the land side a wall is carried across the neck of the promontory enclosing some twenty-four acres of land between it and the town. This wall had three gates to the east and one to the south: it was strengthened by a tower at each end at the edge of the sea, and another on a small mound of rock at the south-east angle. A fosse filled from the sea afforded further protection.

The town itself was only entered by one gate to the east, flanked on either side by a large bastion. Before this lay the outer wall and ditch, and behind it the inner fosse, across which lay the main body or keep of the fortress. On the three other sides the town was protected by the sea and a double wall, including that of the keep. The accompanying plan will show at a glance the importance of the place.

The masonry throughout is massive and well constructed; so much so, that parts of it have been mistaken by some travellers for Roman work. There is, however, not the slightest trace of any building anterior to the Crusading period. The walls are generally of great thickness, ranging from 8 to 21 feet: the centre is composed of exceedingly hard rubble, which in many cases now stands alone, having been despoiled of its ashlar. In the outer walls this ashlar or casing is formed of stones 2 feet in depth, and varying from 2 to 5 feet in length, and always drafted: the draft is 3 inches in breadth, the boss rustic, and projecting usually about 4 inches, though in some cases it extends as far as 12 to 14 inches. In one place of the outer wall the



natives have cut into the stones to obtain the leaden clamps, which they told me were used to fasten the stones together. The inner ashlar is smooth dressed.

We found a series of vaults just within the wall of the keep on the east, south, and west sides. That on the south is 240 feet long, and about 30 feet high; that on the east is divided into several partitions, and has a total length of 264 feet. On the west is a fine groined vault, the bosses at the junction of the ribs being made of four trefoils, growing from the centre. Besides this is a vault 60 by 28 feet: it is cemented inside, and has no proper entrance other than by a man-hole in the roof, though now an entrance has been broken at the west end. Some of the fellahin told me that this was intended as an oil well, but it was more probably intended for water, as its capacity, some 261,000 gallons, would seem to preclude the idea of the former. Beneath the church there is, I was told, another vault, but the entrance to this has for some time been closed.

The most conspicuous fragment now standing is part of the east wall of a large tower, at the north-east of the town, known as El Karnifeh. It is about 70 feet above ground, 16 feet thick, and presents a fine example of the drafted masonry above referred to, on the outside. The rubble is very hard, and bound together by irregular courses of large smooth-dressed stones. The lower part of the inside shows the spring of a barrel-vault, and above this are three corbels, supporting the ribs for a groined roof, made of human heads, one bearded, and of a military aspect, the other with shaven face, and long locks curling at the end. A tower of similar importance and size is said to have stood at the south-west corner of the town, and was known as the *Kasr bint el Melek*, "the castle of the king's daughter." This, however, with the church and other buildings, was first overthrown by the earthquake in 1837, which proved so destructive to Safadh, and thence carried away by sea to Akka, for the repairs of that town, after the departure of Ibrahim Pasha. Before the earthquake the roof was still whole on the church; now its very foundations can only be partially traced. From the measurement and angles of some of the walls, taken by Lieut. Conder, I have tried to restore the building, but it is impossible to feel certain of its accuracy, as one cannot tell how much has been displaced by the earthquake; the force of which is attested by huge masses of masonry rolled down to the sea, and by two windows turned topsy-turvy, with parts of the surrounding walls. The houses of the fellahin and their accompanying dunghills, clustered over the spot, add to the difficulties in tracing the outline of the building. A fragment of one capital survives in fair preservation, and of this I send you a sketch. We found one pillar of gray granite 20 feet 2 inches long, and 3 feet 1 inch in diameter; a similar one is said to be buried in the rubbish near by. These may very likely have stood at the west door.

The cornice mentioned by Dr. Porter ("Murray's Guide") has quite

disappeared, but was talked of by some of the village elders. A tradition is extant among these people that El Melek el Dhabar—who, as I have before mentioned, always does duty for any historic king—though able to take Casarea by assault, was compelled to besiege 'Athlit for seven years before obtaining possession of it.

There are many traces of European work in the neighbourhood. To the north-east is the detached work of Drestray, containing a tower and stables, the former (now ruined) based on a square rock the sides of which have been quarried away to the depth of several feet: the stables, too, are cut out of the rock, the roof having been formed of masonry. Water was obtained during a siege from a cistern hewn in the rocky base of the main tower and from a well at its edge. The springs of Drestray lie about 200 yards to the north-east. This fort commanded a road cut through the "sea-wall" mentioned in my last report. Either this cutting or the fort itself seem to have been called "*petra incisa*" by the Crusading chroniclers (cf. Murray), and doubtless much information might be gathered from those sources about 'Athlit, though I have not been able to find any notice of it in the few books we have here.

Ruins in Wady Shellateh and at Rushmia on Mount Carmel seem to have been held in connexion with 'Athlit, and a quadrangular fort with towers at the corners, still existing in the neighbouring village of Kefr Lām, may belong to the same date, but is much more probably Saracenic, to judge from the irregular masonry and the small size of the stones.

Other symptoms of European occupation are visible in the ditches to drain the marsh east of the town of 'Athlit, in a rock-cut passage for the same purpose leading into the sea, and in a series of drain-pipes laid in a stone casing, apparently leading from the sea to a marsh called now *El Mellahah*, "the salt marsh." The only object I can imagine for these pipes is to bring sea water for evaporation, as the rocky bed of the present marsh being very near the surface, would, with very little trouble, form an excellent salt farm.

I will conclude my remarks on 'Athlit by stating that a former traveller, notwithstanding the pointed arches, Crusading sculptures, and other unmistakable mediæval remains, has described the ruins as of "*purest Phœnician style*." A more forcible instance of the necessity of our work could hardly be found than this utterly groundless assertion, for at 'Athlit there is not the slightest trace of any masonry anterior to the Crusades.

Our present camp is situated on the edge of our former work, and not far from Umm el Fahm. The paucity, or rather deficiency, of villages on the maritime plain between Casarea and Jaffa, left us no other choice. The plain, however, is good travelling at this time of year, and a large tract can be worked with ease. All around us are extensive woodlands of *Quercus agilops*, locally called *mallih*, which extend from the edge of the Beiad el Ruhah to some distance in the plain. A similar forest must have existed within quite recent times a



few miles north-east of Jaffa, as the roots and stumps of the trees are found there still alive. These trees do not often exceed thirty feet in height, as their boughs are frequently cut by the Arabs and fellahín for fuel, and also for the purpose of feeding their goats on the leaves. Beneath the oaks no brushwood is found, but there are a few scattered shrubs, such as the sweet flowered 'abhár (*Styrax officinalis*), with its white blossoms not unlike the orange in colour and smell. The ground is now covered with herbage flecked with brilliant flowers, red, pink, and yellow, the latter colour, however, preponderating.

The plain and lower slopes of the hills are overrun with the flocks and herds of the Turcomans, who, living in the Merj Ibn 'Amir during the summer and autumn, come hither for pasturage during the winter and spring. Though living in tents, they cultivate the soil just like the fellahín, and pay the usual 'ashr, or tithe, to the government.

They have entirely given up the Turkoman language, and now speak nothing but Arabic; several of the local names, however, on Carmel have a decided Perso-Turkish sound, and may perhaps be traced to these men's forefathers. Their mode of life differs in nothing from that of the ordinary Bedawín, but their cast of countenance is frequently Kurdish. They are divided into seven clans (called in Arabic Ashíreh, or Tyfeh) which are as follows:—1. El Tawat-hah. 2. El Binihah, or Beni Gorra. 3. El 'Awadín. 4. El Shagayzát. 5 and 6. Beni S'aidán and 'Alakineh, these two being under one Shaykh. 7. El Nagnaghiyeh. Near Cæsarea are the camping grounds of the Damalkhah and Mus'au Bedawín, and south of them are the Nafa'at. In the Wady Hawáarith are a few tents belonging to the Emir el Hárítneh, whose ancestors once ruled from Tiberias to Cæsarea, and from Akka to Baysan, with a rule of iron. It is probably to a chief of this family that Maundrell ("Early Tr. in Pal.," ed. Bohn. pp. 431, 476) refers by the name of Chibley, who lived at Jenín, and who "eased him in a very courteous manner of some of his coats, which now (the heat both of the climate and season increasing upon them) began to grow not only superfluous, but burdensome."

The tomb of a Moslem *weli*, or saint, named Shibleh, which stands west of Jenín, near Kefr Kúd, is very likely, as suggested to me by Dr. Chaplin, the tomb of this emir, though the fellahín near the spot could tell me nothing of his history.

I may here complete the list of Arab clans in this district by enumerating those in the Merj ibn 'Amir. They are—1. El Kabiye. 2. El S'aidah. 3. El Gharayfat. 4. El Zubaydat, and the Mohommaydat, who live on Mount Carmel. The Ghawárineh, "Men of the Ghor," or depression, live on the plain of Akka, and in the marshes of the Zerka, north-east of Cæsarea. The occupation of these last is chiefly pastoral; and partly by admixture of negro blood, partly on account of the great heat to which they are exposed, their skins are of a very dark coffee colour, blacker and less transparent than those of Abyssinians.

Cæsarea.—The ancient ruins of this city occupy a large extent of

ground, but there is little of interest to be found; I shall therefore first notice the mediæval and Saracenic remains, and afterwards revert to those of earlier date. The Crusading city occupied a space 600 yards long by 250 yards broad, on the coast almost midway between the walls of the ancient city. The wall which forms the boundary of the more modern town is fortified at intervals with towers, and fronted by a ditch. The masonry differs essentially from that of the outer walls of 'Athlît, though resembling the inner construction of that place, being small and undrafted. Against this outer wall a Saracenic scarp—sloping at an angle of 60 degrees—and a counter scarp on the other side of the ditch, have been built. Immediately on seeing the place, I felt sure that this was the case from the analogy of similar additions in various parts of Syria and Palestine; for example, at the so-called David's Tower, Jerusalem; at Kawkab el Hawa, the Crusader's Belvoir; and at the Castle of Horns. Proofs were soon found to show my surmise correct. In one place the scarp half covered a window with pointed arch and vertical joint in the crown similar to those at 'Athlît, and in the Morostân, Jerusalem. There in several places we saw how the scarp had been added on to the original perpendicular wall, after the latter had been finished and carefully pointed with hard white cement (that in the middle of the wall being softer, earthy, and of a blackish hue). Then, to prove the inner part of undoubted Crusading handiwork, we found ribs of groined arches, in one case supported by a corbel formed of a human head; and if this were not sufficient, the remains of a triple apsed church left no room for doubt. Just within the wall may be traced a covered way, 13 feet in width. Little remains of the upper part of the walls, except one tower to the north, on which we found just sufficient room to set the theodolite and observe, and part of the wall, near the southern gate, which stands close to a well of fine clear water, some 20 feet in depth. This well, which is within the walls, seems to have been supplemented by several aqueducts, which will be described further on. The only examples of drafted stones are to be found in the lower walls of the Kala'ah or south-western tower, which, built on a little promontory, extends for some distance into the sea. Here, in the second and fifth courses from the bottom, large columns of red and grey granite, and of black and grey marble, are built as bands alternately with the drafted stones. Beyond this is a reef with ruined buildings on it, being part of the old mole. A little to the north of this some sixty or seventy perfect and fragmentary columns, varying in length from 20 to 5 feet, have been rolled together to form a kind of rude pier in the shallow water on the reefs. Of the mediæval city itself, nothing remains but the ruins of two small buildings, of which the special use can in no way be designated, and of the church. The whole area is covered with shallow pits, from which the well-preserved stones have been taken to Akka, Jaffa, and other places on the coast. The church has suffered less, both on account of the smallness of its stone and the hard crystalline cement used in its construction.

Earthquakes have, however, done what the pilfering masons of Akka could not do. Masses of the wall lie within its area, and by the utter confusion in which they are thrown attest the force of the shock which laid them low. The apse is triple and semi-circular. An arched recess on the north side of the central apse may have been the archbishop's throne, while the rest of the officiating clergy sat in the opposite sedilia. Traces of white plaster are still to be seen on the inner walls of the body of the church. The pavement is visible in one corner, and is of a white marble, set in cement, over a layer of black earthy mortar. At the west end of the church are four buttresses, 18 feet deep by 6 feet in breadth, and some 50 feet high, with sloping tops. The connection of these with the church is somewhat difficult to make out. Beneath the church, and opening out on to these buttresses, are two vaults, one filled up with *débris* and broken in by fallen masses of wall, the other perfect and 70 feet long.

The Roman remains within the mediæval walls are to be seen on the beach near the north-west corner, where there is a layer of coarse tessellated pavement of white stones, buried beneath some 12 feet of *débris*, chiefly composed of broken pottery mixed with fragments of glass and of bones, most of which have been sawn in two. Farther south a wall may be traced, whose lower courses are built of stone, 2½ feet square. Farther on is a drain strongly cemented, and about a yard wide; the top is broken in. Near the church and north of it are some courses of large stones. These may, I think, with great probability be taken as the remains of the temple built by Herod to Cæsar and Rome, of which Josephus gives us the following accounts (Antiq. XV., ix. 6, and Wars I., xxi. 7): "Now there were edifices all along the circular haven made of the most polished stone, with a certain elevation whereon was erected a temple that was seen a great way off by those that were sailing for that haven, and had in it two statues, the one of Rome, the other of Cæsar." And again—"Over against the mouth of the haven, upon an elevation, there was a temple for Cæsar, which was excellent both for beauty and largeness." In the previous sentence he mentions the "white stone" of which the edifices were built.

These remains to which I have referred are so placed as to front the harbour, and are the only stones, with the exception of a portion of wall near the water's edge and now covered with 15 feet of *débris*, which we saw of white limestone. All the masonry of the Crusaders and Saracens, as well as the scattered stones in the outer area, are of cretaceous sandstone. I enclose a sketch to show the character of the masonry: the niches, whose tops are visible, were probably for the reception of statues. A draft and boss appear on some of the stones, which are, however, too much weathered to allow of measurement. I found traces of a similar wall running eastwards from this which is therefore presumably part of the façade. A series of narrow vaults (now broken in) of uncertain date extend between this building and the church, which lies to the south.

The account given by Josephus of the construction of the harbour has been called in question by many. He states that a mole was run out to protect the ships from the south-westerly gales, and that its foundations were sunk in twenty fathoms' water, and composed of stones fifty feet long, by eighteen broad and nine deep. Here we must recollect that Josephus could never have seen these huge blocks, and his information must have been derived from hearsay. Still, the size is not utterly improbable when we still find a quadrangular column of red granite 34 feet long by 5 feet wide, and more than 4 feet 6 inches deep, situated half a mile from the sea. The very numerous columns of granite and marble show that no expense can have been spared in the construction and ornamentation of the city.

The mole is described as 200 feet wide, and composed half of the *procymatia* or breakwater, and half by the quay and vaults in which the sailors lodged. The reef of rocks running westward from the Kala'ah, though robbed of nearly all its hewn stones, still retains traces of walls and answers well enough in size to this description. Here, too, may be seen traces of tessellated pavement formed of rough two-inch cubes, such as one would expect to be used out of doors, and with these the quay was very likely paved. In one place there are two layers of these cubes, as though one pavement had been broken and another laid over it.

Of the theatre and amphitheatre, which Josephus tells us were among the buildings of Herod, only the latter is to be seen; and this, too, is in such a ruined state, most of the stones being carried off, and the remainder nearly concealed beneath drift sand, that, were it not for the description, it would rather be taken for a theatre. In *Antiq. XV.*, ix. 6, we find it thus described:—"Herod built therein a theatre of stone; and on the south quarter behind the port an amphitheatre also, capable of holding a vast number of men, and conveniently situated for a prospect to the sea."

West of this place, on the sea-shore, Lieut. Conder found traces of a jetty and walls of stones, similar to those mentioned in the north-west corner of the town, also two drains partly cut in the rock, partly of masonry, and measuring 9 feet 2 inches in width. Owing to accumulated rubbish, and the tops of the stairs being broken in, their height could not be ascertained. These seem likely to have been some of the drains mentioned by Josephus as "flushed" by the rise of the tide. As on this part of the Mediterranean coast this never exceeds two feet, the drains must have been nearly level. Geological evidence proves that the coast is gradually rising, and during the nineteen centuries which have elapsed since these drains were cut, it is not improbable that they have been raised to the height of some two or three feet above the present sea level.

An oblong space, 350 by 90 yards, towards the east of the old city, seems to have been a hippodrome. Here is to be seen the huge granite column before mentioned, as well as three cones, measuring 5 feet 8



inches diameter at the base, 4 feet at top, and 7 feet 6 inches in height. Near these, and also of similar pink granite, is a square pedestal measuring 7 feet a side, and projecting 1 foot 6 inches above the surface of the ground. The southern end of this course is banked up, and traces of the city wall appear outside it. The circuit of the ancient town can pretty accurately be traced to the corn-fields, as the ground outside them is much more sandy and unfit for cultivation. In most places, too, there are actual traces of the wall, but it has generally been destroyed for the sake of the stones it was composed of, and bits of the worthless rubble are all that we now see.

*Aqueducts.*—The aqueducts for the supply of the town next deserve our attention. They are two in number, and come into the north of the old city near the sea. The high-level, which has a double channel, comes from Subbarín, having been made, according to native tradition, by two daughters of a king, for a wager, to see who would first carry water into Cæsarea. The well at Sindiani, two miles south-west of Subbarín, is said to owe its supply to this aqueduct having been accidentally broken into by women digging for clay to roof their huts. The same legend attaches to some springs south-east of Cæsarea, called 'Ayyún el Benát, the "Maidens' Springs." Here, however, no traces have been discovered.

The low-level aqueduct comes from the Jisr el Zerka, and has a total length of three miles. It is supplied by the Nahr el Zerka, which, at the mills about a mile and a half from the sea, is stopped by a broad dam, which raises the water some twenty feet. Its channel is at first rock-cut, and open at top, but afterwards is a vault of masonry, 7 feet high, and 6 feet 4 inches wide, built on the low hills bordering the sea. The high-level can be traced for six miles, as far as a spring called 'Ain Ism'aín, a little below Sindiani. At this latter village it is again found in the well from which the natives still draw their supply, but higher up it is quite lost. This branch, though originally supplied from Subbarín, received large contributions from Miamás—of which place more anon—and was then carried nearly due west, to avoid the hills of drift sand. Below the mill of Abu Núr its construction can be well examined. It consists primarily of three red earthenware pipes, 6½ inches diameter, embedded in hard cement and carried either on a wall or over arches. In one place, air holes to relieve the pressure, and consisting of two similar pipes opening upwards from the conduits, are still visible. To the south of this has been attached, presumably at a later date, a similar aqueduct, also with three pipes. About 500 yards west of the mill this southern section takes an eccentric circuit with four angles, and rejoins the other shortly before passing through the "sea-well." The object of this *détour* is difficult to explain, unless it be on account of the marshy nature of the ground over which it passes. This southern branch is more perfect than the northern, and its arches in better preservation. On reaching the "sea-well" the aqueduct is carried through the rock, and is reached at intervals by man-holes 27 feet deep by 11



feet wide at top, and decreasing to 3 feet 3 inches at bottom. Steps lead down to the water, passing twice along each of the four sides of the shaft. The water channel is too much choked up for any exact measurement to be taken. After passing through the "sea-well," the water was carried on arches to the town of Cæsarea. In some places the aqueduct, judging from the masonry and method of "pointing" the joints, seems to have been repaired by the Saracens or Crusaders.

At Miamás there are several large springs, and many traces of dams and cisterns. At the base of the Khashm, as the bold headland forming the south-west extremity of Carmel is called, is the Kala'at Mi'amás, a Saracenic or Crusading tower tacked on to a Roman theatre. The latter building is much ruined, all the seats being destroyed, and the greater part of the outer as well as the inner line of vaults. The measurement across the front of the theatre, which faces S.S.E., and overlooks the plain and oak woods, is about 180 feet. The masonry is curious: the stones are built together without much regard for order, some being put in lengthwise, others on end, others on their side, the interstices being filled up with excellent mortar. The arches of the *vomitoria* are irregularly built, usually without a keystone. The main wall of the building between the outer and inner vaults is not built in a curve, but in short straight pieces. Several fine granite columns may be seen near the theatre and at the stream below; these, no doubt, belonged originally to the *proscenium*. Around the building are traces of rude dwellings, but as they seem to have been constructed with the stones pillaged from it, they may be referred to the period of Saracenic or Crusading occupation. As yet we have found no mention by any old writer of this theatre in connection with Cæsarea, from which it is distant about five miles. This is curious, as it must doubtless have been frequently resorted to by the inhabitants of that place.

On the summit of the Khashm above is a curious ruin of Roman construction. It consists of a square, enclosing a double and a triple vault with an irregular semicircular arch. The interiors of these vaults are connected by a series of square holes on a level with the ground, and measuring 2 feet by 2 feet. The object of these is difficult to imagine. Near this ruin is a fine rock-hewn cistern of bee-hive shape and well plastered. Directly to the west are the precipitous cliffs of the Khashm, tenanted by numerous griffon and Egyptian vultures, as well as by hawks and eagles of various kinds.

The view from this point is very extensive, reaching from Carmel Convent to far below Cæsarea. Immediately at one's feet dense thickets of reeds and tamarisks cover the marsh of the Zerka, and afford shelter to wild boars and crocodiles. (I have offered a reward for one of these reptiles, and have great hopes of obtaining a specimen.) Eastwards the heights of Shaykh Iskander, above Umm el Fahm, the block of Shaykh Bayazid above Jeb'a, Mounts Ebal and Gerizim, and the main points of the central range southwards, are still visible. Hence the extent of the oak woodland, the *ingens sylva* of the Romans,

of the encroaching tongue of sand stretching eastwards from Cæsarea, and other natural features of the district, may be studied with advantage.

CHARLES F. TYRWHITT DRAKE, F.R.G.S.

## THE AMERICAN PALESTINE EXPLORATION SOCIETY.

(From the *Observer*, New York.)

OUR American Exploring party have made a brilliant beginning for us. We were expecting valuable discoveries, but not so soon. Our allotted field is beyond the Jordan, and only preparatory labour was looked for on this side the river. But while Lieutenant Steever has been hard at work day and night in Beirut, organising the expedition, testing his instruments, and getting everything ready for the final march, our archæologist, Professor Paine, has not been idle.

### THE HAMATH INSCRIPTIONS.

The readers of the *Observer* have all heard of the famous Hamath inscriptions. Our countrymen, J. Augustus Johnson, Esq., then American Consul-General in Syria, and the Rev. Samuel Jessup, were the first to discover and describe them, some three years ago. Copies of them, first published by our own Society, are now exciting the liveliest interest among scholars. We shall soon be able to put the public in possession of more exact and authentic copies. The stones were taken through Beirut a few weeks ago, on their way from Damascus to Constantinople. Our Consul-General in Syria, J. Baldwin Hay, Esq., persuaded the Turkish Government to permit our party to take impressions of them. The time was short, but Lieut. Steever and Professor Paine gave themselves eagerly to the work, and the result is a complete set both of squeezes and of plaster casts, which are now on their way to America. Our pamphlet, which is soon to be put to press, will tell the whole story; but meanwhile it may not be amiss to state that what have been called the fourth and fifth inscriptions turn out to be but parts of a single inscription carried round the stone.

### THE GREEK INSCRIPTIONS AT DOG RIVER.

But of still greater importance is Professor Paine's discovery of three new Greek inscriptions, the existence of which appears not to have been even suspected. We accept the discovery with gratitude as an auspicious inauguration of our work in the Holy Land. Nahr el Kelb, or the Dog river of modern Arabic geography, is the *Lycus Flumen*, or Wolf river, of the Roman period. It rises in the heart of Lebanon, plunges down a wild and romantic gorge, and empties into the Mediterranean about two and a half hours, or seven miles, north-east of Beirut. The southern mountain wall which overlooks this rapid stream terminates at the sea in a bold promontory, around which, at the height of 100 feet above the water, winds an ancient road cut in the solid rock. The present road was cut in the reign of Marcus Aurelius, about 173 or 176 A.D. It is some six feet in breadth, paved with large uneven

stones. But above it, for a part of the distance, there are traces of a still more ancient road. On the wall of rock that lines the roads (three of them on the present Roman, six of them on the older road) there are nine historic tablets, first discovered by Maundrell in 1697, and often described and copied since. Three of them are Egyptian, and six Assyrian. According to Lepsius, the three Egyptian tablets bear the cartouche of Rameses II., about 1300 years B.C. Of the Assyrian tablets, one at least is the work of Sennacherib, about 700 B.C.

It was on the upper and more ancient road that Professor Paine made his fortunate discovery. He found there three Greek inscriptions, one of eight lines, one of twelve, and another of ten. He took squeezes of them all. The longest, of twelve lines, he has deciphered and rendered into English. Some errors may have crept into the transcription, but the legend is substantially as follows:—

Προκλε πεπον Τατια νου Αρισιοιο Α  
 κοιο γενεθλης ιθαγενοιο  
 Αρχικα πατρωιων εξωριαζων φαυλα  
 πρωθηβης φοινιξ Ηλιομπολεως Θεο  
 φιν αρχων Αψα Μαλεκ τελων ιερα  
 οσσα νοφ φρονεε φοινικη αυτη  
 οσον και τοΔς εργαζοτεδν νοήμα  
 ω μεγα Θαυμα τα αιπυσατα των  
 σκοπελων ισον εθηκεμεσον  
 οφρα Διηνκεως ομαλην οΔον ει  
 ν νοντες φευγωμεν χαλεπεις  
 υψος οδοπλανης.

Proclus, friend of Tatian, son of Arisius, of A  
 co as to his birthplace, of honourable descent,  
 leaving behind the royalties of his fathers for a  
 common rank,

A Phœnician in the bloom of youth, of Baal'bek by  
 the will

of the gods, the ruler. Forthwith to Malek perform-  
 ing sacred rites,

As many as he thought prudent for Phœnicia itself,  
 in proportion also to this very to be executed purpose.

Ah, great marvel! the steepest parts of the  
 promontories he made level in the middle:

In order that, from beginning to end, the road being  
 even, in

the rainings we may escape difficult approaches;  
 the height being circuitous as to the route.

These names are new to history. Proclus appears to have been a Phœnician, of Aco (Acre), of royal blood, governor of Baalbeck. Of his date, as related to the Egyptian, Assyrian, and Roman dates, this is not the place to speak. Professor Paine's report will soon be published, and our scholars will then have the problem fairly before them.

ROSWELL D. HITCHCOCK,

*President of the Palestine Exploration Society.*

## SURVEYS IN PALESTINE BY CAPTAINS MIEULET AND DERRIEN, OF THE FRENCH ETAT MAJOR.

*From the Journal of the Paris Geographical Society.*

THE field operations undertaken with a view of constructing a map of Palestine were commenced in May, 1870. The first operation was the measurement of a base on the Plain of Acre. The western end was marked by a station 6ft. 5in. high, on a slight elevation, the eastern by an isolated tree (Dom) on the plain.

From this base, 8,725ft. long, the distance between the station at Tantourah and the Castle of Acre was found to be 22,760ft. By means of the side Tantourah—Acre Castle, the distance between Carmel and Acre Castle was calculated to be about 47,232ft. The side Carmel—Acre Castle was determined by the English Admiralty Survey, and its azimuth was known. This side served as a base for the triangulation.

Twenty-one stations were fixed with a theodolite, and all remarkable features of the ground were observed. The triangulation plotted on a scale of 1-100,000 was used as a basis for the Survey, and the detail was filled in on the same scale with a compass.

The map shows towns, villages, isolated houses, tombs, ruins, springs, wells, rivers, ravines, roads and paths, woods and cultivation; and the features of the ground by contours. All remarkable features of the ground were levelled, and the altitudes of more than 500 points determined with reference to the level of the sea.

The names of all the inhabited places in the mountains, of the rivers, springs, wells, ruins, &c., are carefully written on the map in French and in the Arabic character.

More than 1,019 square miles were surveyed, comprising the greater portion of the pachalik of Acre.

The work was interrupted in the first fortnight of August, 1870, and Captain Derrien is now engaged in putting his notes together.

### FURTHER NOTES ON OUR LORD'S TOMB.

IN a former *Quarterly* (June to September, 1870, pp. 379-81) I submitted some notes on our Lord's tomb, the object of which was to show that it must have been multilocular, and situated to the east of the city, probably on the Bethany road; and, therefore, that the present site could not have witnessed our Lord's entombment.

I am now prepared with further reasons for believing that our Lord was crucified (and, necessarily, buried) to the east of the city.

1. He was certainly crucified on a high road side (Matt. xxvii. 39; Mark xv. 29; Luke xxiii. 26), leading past gardens (John xix. 41).

2. There appear to have been but two *main* approaches to the city,—
  - a. That from Jericho, through Bethany, and round the Mount of Olives, and entering the east of the city by the Fish Gate.
  - b. That from the Maritime Plain and Joppa, entering the north-west of the city by the Gate of Ephraim.

A minor approach from Bethlehem entered the west of the city through the Gate of Gennath.

We must exclude the Joppa road as not complying with requisitions presently to be advanced; and also the Bethlehem road as not leading through gardens.

3. The gardens of David and Solomon were at the junction of the Kedron and Hinnom valleys south-east of the city. The base of the Mount of Olives was laid out in gardens, which also existed to the north of Agrippa's wall. There is no record of gardens existing to the west of the city. The Garden of Gethsemane was undoubtedly to the east of the city, as it was reached by crossing the Kedron (John xviii. 1).

4. In fixing the site of the crucifixion we must bear in mind that it was capable—

- a. Of being witnessed from "afar off" (Matt. xxvii. 55; Mark xv. 40; Luke xxiii. 49).
- b. It must also be within clear view and hail of the priests (Matt. xxvii. 41; Mark xv. 31), who can behold and revile (*in our Lord's hearing*, be it remembered) without fear of the defilement (John xviii. 28) attendant on an execution at the place of a skull.

The city side of the Kedron gorge (400 feet, *not* 150 yards, from the Bethany road) would easily have allowed the women and centurion to have viewed from "afar off," or "over against" (*ἐξ ἐναντίας*, Mark xv. 39) the site; and the equally near roof of the eastern cloister of the temple would easily have accommodated the priests and rulers.

Nowhere on the Joppa or Bethlehem roads could these conditions, especially the second, have been complied with. We are therefore driven to the Jericho and Bethany road, which alone of all the city approaches would meet the necessary requisitions.

5. I think the strict conformity between type and antitype necessitates that the eastern side of the city should have witnessed the crucifixion. As the temple faced the east, we can understand the fitness of its veil being rent in the presence of the fleshly Veil rudely torn on the opposite cross; we can understand the consummation of the great Antitypical Sacrifice in full view of the opposite typical altar.

But this analogy disappears if we remove the scene of the crucifixion to the west of the city, *i.e.*, to the back of the temple, whence only its outline could be seen.

6. St. Paul, I think, fixes indisputably the site of the crucifixion. Thus, in Heb. xiii. 11, 12, he writes: "For the bodies of those beasts (the sin offering) are burned without the camp. Wherefore Jesus also . . . suffered *without the gate*." —



What gate? This is clearly not an abstract statement, implying simply "beyond the city walls," but a distinct reference to *the* gate, τῆς πόλεως, by which the sin offering was carried forth to be burned without the city.

Now we can hardly suppose that the sin offering would be carried away all through the crowded and bustling streets, far away to the west, when the eastern gates of the temple, leading directly into the country, were close at hand. Through one of these gates, probably the great East Gate, the offering was taken out; and outside *this* gate, ἐξ τῆς πόλεως, our blessed Lord was crucified.

7. Then if he was crucified to the east of the city, there he was buried; for "in the place where he was crucified there was a garden: there laid they Jesus" (John xix. 41, 42).

N. F. HUTCHINSON, M.D.

MORAR, April 28th, 1873.

NOTE.—I think the following extract interesting, as indirectly indicating the eastern site of our Lord's tomb:—"When the apostles separated to evangelise the world, Mary continued to live with St. John's parents in their house near the Mount of Olives, and every day she went out to pray at the tomb of Christ, and at Golgotha."—*Bishop Melito's (of Sardis) History*. See Smith's Dictionary, art. "Mary the Virgin," p. 264.

It is here clearly implied that St. John's house, the tomb of Christ, and Golgotha were alike "near the Mount of Olives." Mary had only to go out to reach the hallowed spots. We cannot understand her as passing through the city to the westward for that purpose.

## HAMATH INSCRIPTIONS.

THE observations of the Rev. W. Wright, of Damascus, demand no comment from me. Time will show whether I was correct in the first tentative investigations of these inscriptions.

It will be observed that M. Clermont-Ganneau in his remarks on the kindred inscriptions of Aleppo, expresses the same opinions as myself in favour of an independent syllabic character anterior to the Phœnician alphabet. He likewise refers to the possibility of its connection with the systems of Egypt and Assyria.

M. Clermont-Ganneau's proposition of the term of Syrian for these characters is useful, because it serves to localise and define them.

HYDE CLARKE.

## “MIDDLE CITY”—“SECOND CITY.”

*To the Editor of the Quarterly Statement.*

SIR,—The difficulty felt by your correspondent “H. B.” when he asks what is the exact meaning of the expression, “the Middle City,” in 2 Kings xx. 4, and of “the Second City” in 2 Kings xxii. 14, Neh. xi. 9, and Zeph. i. 10, seems to have been shared by our translators when they rendered the former *middle court* and the latter the *college*. The critics have been in similar perplexity when they have explained the middle city to be Zion city, and the second city to be the lower city. The confusion serves to show the need of thorough topographical investigation, such as that carried on by the Committee of the Palestine Exploration Fund, without which such references to local features will never be understood.

Some topographical features of the site of Jerusalem are indicated in Psalm xlviii. 2, which should be rendered:—

“Beautiful for height, the joy of the whole earth, is Mount Zion—on the thighs of the north is the city of the great king.”

Jerusalem, says Josephus, was built upon two hills, which are opposite to one another, and have a valley to divide them asunder (*Wars* v. iv. 1). On the north of Jerusalem is a mountain plateau, and these two hills stretch down from it like two legs or thighs, with the Tyropœan Valley between them. The western thigh is the higher, and would be the site of the Upper City; on the eastern thigh would be the Lower City and the Temple; and when eventually the valley between them became occupied with houses, this would constitute the Middle City. The Hebrew word means “middle” in the sense of the divided part. In the parallelism of Hebrew poetry the second line does not simply repeat the idea of the first, but repeats it with some expansion, addition, or variation. In the present instance we have the eastern hill in the first line, and the whole of Jerusalem in the second. A parallel passage is Isaiah xiv. 13: “I will sit also upon the mount of the congregation, in the thighs of the north.” The mount of the congregation is the temple hill, the thighs of the north include the whole city.

Assuming this to be so, let us look at the texts referred to by “H. B.,” and see if any light is thrown upon them. In 2 Kings xx. 4, Isaiah goes out from the presence of Hezekiah, and “afore he is gone into the Middle City” the word of the Lord comes to him. The royal palace, there is every reason to believe, was on the eastern hill—in the Lower City—and assuming that Isaiah was making his way to the Upper City he would have to pass through the Middle City to reach it.

In 2 Kings xxii. 14, “Huldah dwelt in Jerusalem—in the second (Jerusalem).” The Hebrew word (*Mishneh*) means second in order second in dignity, and might well be applied to that division of the city

which was second in order, whether you began reckoning from the east or the west. The Second City therefore would appear to be the same as the Middle City.

In Neh. xi. 9, Judah the son of Senuah is ruler over this Second City. Probably the two "thighs" were separately fortified at an early date, and the valley between them would be suburban to both. It would thus probably be the same as Josephus's "suburbs" (*Antiquities* xv. xi. 5), and perhaps the same as Parbar or the Suburb mentioned in 1 Chron. xxvi. 18 and 2 Kings xxiii. 11. The Second City itself would thus be virtually separate, so as to justify separate rule, and would only need short east-and-west walls at its northern and southern ends to shut it in entirely.

In Zeph. i. 10 the prophet is describing an invasion. Jerusalem, as was usual, is attacked on the north. There is first a noise from the Fish Gate, which for several independent reasons I should identify with the present Damascus Gate, at the head of the Tyropœan Valley. Of consequence there is next a howling from the Second Jerusalem, for the forcing of the Fish Gate has brought the invaders into the Middle City. Next, the alarm having spread, there is a crashing of spectators from the hills which constitute the "thighs." Lastly, the inhabitants of Macktesh are to howl. Macktesh means a mortar or socket, and may be a name descriptive of the hollow at the junction of the three valleys—Hinnom, Tyropœan, and Kidron—where, perhaps, the wealthy people would live. Some place the King's Gardens near here. The inhabitants are to howl because "all the merchant people are cut down." Now, the sweep of the invaders has been down the Tyropœan Valley, and "Tyropœan" is thought by some to mean "Valley of the Tyrian merchants." Another possibility is that Macktesh may have been one of the transverse valleys, since filled up, but rediscovered by Captain Warren.

For different views, see Lewin's "Sketch of Jerusalem," pp. 53, 54, where "the second" is taken to mean Second Gate (from Fish Gate); and Thrupp's "Ancient Jerusalem," pp. 116, 117, where the words of Zephaniah are supposed to indicate not the order of events, but the order in which they would be discovered by a person in the Upper City.

GEORGE ST. CLAIR.

To the Editor of the "Quarterly Statement" of the Palestine Exploration Fund.

April 23rd, 1873.

SIR,—Allow me to attempt a reply to the two queries of "H. B." published in your last *Quarterly*. No doubt in the original of 2 Kings xx. 4, the Hebrew is הָעִיר, which means the city, and not court. But "H. B." seems to have overlooked that this is the *Keri* (the reading in the

text), but that the *Khetib* (the marginal reading) is  $\text{קצר}$ , which means court. This reading was evidently before the Greek translators, their rendering being, as observed by "H. B." *αυλη* (court), and not *πολις* (city). Why the two readings should so greatly differ, and why the one is to be preferred to the other, is a question the discussion of which I presume does not come within the province of your columns. In reference to the second query I beg to observe that the Hebrew word rendered in the authorised version "college" is  $\text{קצר}$ , which the Septuagint evidently considered as the name of a certain part of Jerusalem, and therefore did not translate it. The word in question being derived from the root  $\text{קצר}$ , to repeat, to do (a thing) over again, the rendering "second city" is correct, and seems to mean as much as our *New Town* in contradistinction to the *Old Town*. Should it be the same which Josephus (Bell. Jud. v. iv. 2) calls *καὶνὸς πόλις*?

A. B.

---

## NOTE ON THE NEWLY DISCOVERED SAMARITAN STONE.

MR. PRITCHETT writes as follows:—

"In Gaza there have been three Englishmen resident for eight years in charge of the telegraph station. One of them, my friend Mr. Nimmo, received me as usual into his house, and very hospitably entertained Mr. Hamilton also. Another, Mr. Pickard, produced the stone which you mention, and Mr. Hamilton forwarded a squeeze of it to England. The stone had been accidentally found by men who were digging old foundations out of the sand for building materials, and Mr. Pickard brought it from thence. There can be little doubt of obtaining more if proper measures are taken,—through Mr. Hamilton, for instance, who now knows the place and the people. The stone is carefully preserved by Mr. Pickard."

This is at present the only information we have, except the squeeze itself, of the stone. The squeeze has been very kindly given to the Society by Mr. Dunbar Heath, to whom Mr. Hamilton sent it. The inscription is a passage from Deuteronomy iv. 29—31. It has been suggested that the stone belonged to a Samaritan synagogue at Gaza. We shall probably be able to write more fully on this interesting stone in the next number of the *Quarterly*.

---

## ANNUAL GENERAL MEETING,

HIS GRACE THE ARCHBISHOP OF YORK IN THE CHAIR.

The CHAIRMAN: I will now call upon Mr. Holland, one of the Hon. Secs., to read the Report of the General Committee.

The Rev. F. W. HOLLAND read the Report:—

The work of the past year has been marked by continual and very satisfactory progress.

At the last Annual Meeting the Committee announced the resignation of Captain Stewart in consequence of ill health, and the appointment of Lieutenant Claude Conder, R.E., to take his place in charge of the Survey Expedition. Mr. Conder started for Palestine last July, and has since remained in command, having the valuable assistance of Mr. Tyrwhitt Drake.

The Committee desire publicly to record their sense of the ability, activity, and zeal which both Mr. Conder and Mr. Drake have displayed in the prosecution of the work.

After three years of hard work in Palestine and Syria, Mr. Drake is now on his way to England for a well-earned holiday; but will, it is hoped, shortly return to resume his labour.

The two non-commissioned officers, Sergeant Black and Corporal Armstrong, have continued to give the greatest satisfaction to the Committee, as will appear from Mr. Conder's report, and the strength of the party has recently been augmented by the addition of Corporal Brophy, also of the Royal Engineers.

During the year 1872 the Triangulation and Survey covered 1,200 square miles; during the present year, up to the date of the last report received, 400 more square miles have been surveyed.

The reports of the Survey and work in other directions have been published from time to time in the *Quarterly Statements*, which, in addition to Messrs. Conder's and Drake's reports, have contained many interesting and important papers, such as that on the Meteorology of Palestine, by Mr. Glaisher and Mr. Buchan; Captain Warren's list of Arabic names; Mr. George Smith's account of the history of Palestine as given in the cuneiform inscriptions; papers on the Hamath inscriptions, on the Shapira pottery from Moab, on the chronology of Palestine, and on various discoveries at Jerusalem.

To the writers of these papers, which have all been presented to the Society, the Committee have to express their warmest thanks.

A very important list of probable sites awaiting identification, and suggestions for making further discoveries, has been laid before the Committee by M. Clermont-Ganneau, whose name is so well known in connection with the discovery of the famous Moabite Stone.

M. Ganneau is most anxious to follow up his researches in Palestine,



which have hitherto been attended by such marked success; and the great importance of his suggestions has led the Committee to arrange with him to go out again in October in their service, provided that the necessary funds are forthcoming, and that the consent of his government is obtained, which they trust may be the case.

The income of the Society during the year 1872 amounted, from all sources, to £3,317 1s. 2d. The expenditure included £2,337 9s. 8d. for exploration expenses; £481 6s. for rent, salaries, advertising, and office expenses; £92 1s. 10d. for postage (including the sending of the *Quarterly Statements* to all subscribers), and £281 7s. 1d. for printing and lithographing, *i.e.*, for publishing the results of the work.

In the autumn of 1872 the Committee published a new book, entitled "Our Work in Palestine," which gives a clear and popular account of the work of the Palestine Exploration Fund since its foundation. Five thousand copies of this book have already been sold, and the sale of it still continues to be brisk.

With regard to the present financial position of the Fund, the amount received since the last annual meeting has been £2,985 16s. 4d.

The expenses of the Survey will amount to upwards of £2,400 during the year, and the Committee have now to appeal for funds not only to complete the Survey, but also to enable them to employ M. Ganneau for a year, that he may carry out the explorations which he has suggested, and which cannot fail to afford most valuable results.

A very interesting exhibition in connection with the Fund has just been opened by the Committee at the Dudley Gallery, Egyptian Hall, with the object of increasing the interest of the public in their work and promoting a better knowledge of the Holy Land and Jerusalem. Their special thanks are due to Mr. H. A. Harper for the loan of his extremely beautiful and truthful water-colour sketches, which form an important feature in the exhibition; also to Sir Henry James for the loan of models and photographs from the Ordnance Survey office; and to M. Clermont-Ganneau, for the loan of a valuable collection of inscriptions, seals, &c. Amongst other things there are exhibited the newly-obtained casts of the Hamath Stones, a cast of the Deluge Stone from the British Museum, original Sinaitic inscriptions, models of ancient and modern Jerusalem, Mr. Conder's sketches of the Shapira pottery, and tracings of several sheets of the new map of Palestine, the making of which forms at the present moment the principal work of the Fund. These tracings, some of which are lying on the table before you, show clearly how accurately and well the Survey is being carried out; and how far the new map, when completed, will not only surpass all previous maps of the Holy Land, but also be in itself a complete work, leaving nothing further to be desired.

The Committee have to deplore the loss of the following distinguished members of their body: Lord Ossington, who addressed the last annual meeting, and at all times took the warmest interest in the work, Mr. W. Tite, and the eminent Semitic scholar, Mr. Emanuel Deutsch.

The following is a report, received from Lieutenant Conder, of the progress of the Expedition under his command during the past year.

#### LIEUT. CONDER'S REPORT.

When last the subscribers gathered to hear the history of the work done during the course of the year, the new expedition for the completion of the Survey of Palestine had just received a very serious check—the Committee had been obliged to announce the resignation of Captain Stewart, and but for the energy of my present colleague Mr. Drake, who for six months worked on alone through some of the most difficult country in Syria whilst expecting my arrival, the undertaking must have come to an untimely termination.

So small a party was probably never before entrusted with so important a work. It is but just to add that it is rarely that an officer can hope to command two men so thoroughly able and competent as Sergeant Black and Corporal Armstrong. The entire trustworthiness and soundness of Sergeant Black's work is a subject of the greatest satisfaction, and the zeal and pride in their work, and the quickness which both men have displayed in acquainting themselves with subjects entirely new to them, and in picking up the language, are points in the highest degree connected with the satisfactory nature of the report which I am able to lay before the Society. Palestine contains 6,600 English square miles between Dan and Beersheba, the Jordan and the great sea. Of this we have, at the time I despatch this report, completed 1,615 square miles, or nearly a quarter of the whole. When I reached Palestine in the beginning of July, 1872, the part marked on the map between Jaffa, Jerusalem, and Nablus was complete, with the exception of the hill representation, giving an area of 560 square miles, and a monthly rate of 110 square miles. Commencing again about the middle of the month we worked without a break to the middle of December, and included Samaria, the great plain, Nazareth, and Carmel within our limits. The total was thus brought up to 1,250 square miles, or more than one-fifth of the whole of Palestine—the work of four men in one year's time. The monthly rate during this second period was increased to over 140 square miles, and during the four weeks of September 150 square miles were finished, including the measurement of the "Base of Verification," near Jenin.

The lateness of the rainy season made it impossible to begin in the field before the last day of February, yet notwithstanding the fact that the country near Athlît, Tantura, and Cesarea is far fuller of interesting relics than any part we had previously visited, we had added before moving to our twentieth camp at Mukhalid another 300 square miles, giving a monthly rate of 170 square miles, far beyond any former rate, and indeed not one to be expected in other parts of the country not including, as does the plain of Cesarea, long tracts of blown sand without habitations or ruins. But such a statement of the quantity

completed would not be a satisfactory one, if I were unable to report favourably as to the quality. That this should be superior to that of any former map of Palestine is but a poor recommendation; our aim has been to make the production of a *better*, to the same scale, impossible. In September I was able to send news of the satisfactory nature of the great check on the work obtained by comparing the calculated length of the base line near Jenin with its actual measurement. In December I was further able to explain how, starting from a fixed latitude and longitude at Jaffa, we had carried our triangulation over a length of nearly 120 miles back to another fixed point at Acca, and had done so without error. Further details, and I feel sure not less satisfactory, will be furnished when the calculations in England are worked out.

Of the actual execution of the work the tracings sent to England will give an idea. The credit is mainly due to the workmanship of my two men, as the representation of the hills is the only part which I can claim as my own handiwork. The method employed in this has been considered by competent authorities satisfactory for the purpose, but is, of course, different from that which will be used when the map is engraved. The original copies remain in our keeping, and the work upon them is perhaps better finished than was possible on a thinner paper.

Some account of the method pursued in the outdoor survey may prove interesting to those who see merely the results in England. The average duration of a camp is three weeks, and their general distance apart twelve miles; but the amount of country which it is possible to survey from one centre differs according to its character and the situation of the camp, as regards the old work, from 60 to 150 square miles.

The first day is generally devoted to preliminary arrangements, and to the calculation from astronomical observations of the latitude of the place, other observations being added for the correction of the chronometers.

Our first operations after this consist in the choice of good points, from which the country for a radius of ten or fifteen miles may be seen; and in cases where such points are the highest tops of hills on which no building is found, they have to be visited, and a solid drystone cairn eight or nine feet high, whitewashed on such sides as point to other stations, has to be erected. In sandy ground this is superseded by a mound of sand and bushes piled to a sufficient height. In some cases an artificial tree is found most suitable for long-distance observations. In many places, however, the little square white tomb-house, with its round dome and overshadowing sycamore or carouba shining in the distance, indicates a good standing-ground for the theodolite. These are about as numerous and as useful to the surveyor as are the towers of our English parish churches.

The points chosen, the theodolite is conveyed on the back of a mule

to the spot, and every prominent object is observed, and its position with regard to the point of observation accurately determined. It is on these occasions that my colleague, Mr. Drake, collects the majority of the names, which are afterwards verified. This part of the work occupies about a week, and has lately given an average of ten hours per diem, of which six were consumed in riding to and from the point.

These operations finished, and the skeleton of the map thus constructed, the filling in of the detail next occupies our attention, and it is then that the greatest difficulty arises. A road (though generally a very bad one, yet better than none at all) leads to almost every important point; but where every inch of ground has to be gone over, it is, of course, impossible to follow one path. Cross-country work now begins, and tired horses have to be dragged up and down places where at first sight it would seem impossible for them to move. Rocks and boulders, thistles 10ft. high, deep mud, treacherous marshes, thick coppice, and burning plains, all add to the difficulties of the work, and places which may afterwards prove important are so hidden away that their position could not be imagined till one came quite close. However, by degrees all is worked in roads, villages, ruins, rivers, and all the details you see on the map are fixed, hill slopes measured, the geology examined, and collections increased. One day is then allowed to ink in and finish the whole, and the tents are then immediately struck, and the round of labour begins again.

My professional department is of course the only one for which I am responsible to the Society. Of the two important subjects of nomenclature and identification, it is not my duty to speak; all concerning which I wish to assure the Society is the thoroughness of that part of the archæological department of our undertaking which it is my calling to superintend. Of the date or value of any particular ruin my opinion would of course not be considered of great importance, except in as far as any one must learn from a constant comparison of various examples of a few styles. Mine is the more modest task of preserving all necessary notes of the fast crumbling monuments of antiquity. We are instructed to discover, measure, and sketch all that remains of ruins, some over 2,000 years of age, which have been subjected in turn to the fury of contending nations, the violent action of sun, wind, and rain, each more powerful than in more northern climates, and finally to the vandalism of the fellahin. I will briefly report on what we have done as regards these instructions.

With the 700 square miles sent home from Haifa, I sent a return, briefly epitomised in the accompanying report. This return contained a notice of every ruin marked on the map between Nablus and Haifa, and it will perhaps be remembered that no less than 35 per cent. were mere heaps of water-worn ashlar, or grey mounds, where once a ruin had stood. In such cases it is of course impossible to do more than mark the place on the map and plans, as sketches would convey no valuable information. Of the remaining relics, however, it is possible



to collect more than can be placed on the sheet, and accordingly a plan of each, with sketches, sections, and drawings of details where necessary, has been made, and the whole are kept in one book, into which they are transcribed as soon as possible from the field note-books. This volume forms, as it were, the memoir to the map. Among its more important contents I may mention notes on the ruins of Cesarea (where we found the wall of Herod's temple to Cæsar and Rome, and the famous drains at sea level mentioned by Josephus), those of Tantura and of Athlit. Three great Roman aqueducts, a little temple near Jenin, Crusading forts at Tell Kaymun, Seffuryeh, Rushmia, Kakun Dustray, Shellaleh, and Kalensawweh, and no less than 150 rock-cut tombs of every description. A similar return has been constructed of the country passed over before my arrival, but is not as yet complete, and several plans and sketches await the time when I revisit that part of the country to execute the hill shading. This portion of the work is further supplemented by special surveys on a large scale of such places of importance as Cesarea and Athlit, and finished scale plans of their remaining buildings.

The meteorological observations, on the correct keeping of which Mr. Glaisher, who first interested himself on the subject, will be able to report, have been kept with all possible regularity in our camp, and thanks to the exertions of Dr. Chaplin and of Dr. Varten, they have also been forwarded from Nazareth, from Jerusalem, and from Jaffa. At Beyrout they have been under Mr. Eldridge's care, and have no doubt been equally satisfactory.

*Geology.*—The instructions with which I am furnished containing the combined experience of preceding expeditions, further direct my attention to the geology and natural history of the country as collateral branches of investigation. The Society has, indeed, refused to content itself with other than *professional* work; but I hope that when the time comes for sending out a distinguished geologist, the geological map which I am constructing may prove of service in directing him to points of interest, and that observations made honestly will be verified by his researches.

*Natural History.*—In natural history our attention has been chiefly confined to entomological collections and to the drying of plants. I may mention that a valuable collection of Orthoptera and Coleoptera is now being carried on at Jerusalem by Dr. Kersten, as the nucleus of a Jerusalem Museum, and that he has very kindly given me every possible assistance and much useful advice.

I cannot close this report without touching on a subject which to me, as to all members of the Fund, is of the very highest interest. I mean the "Exploration of Jerusalem." The attention of the Fund has indeed been lately diverted from this centre, but I sincerely hope that the labours of Captain Warren are yet to be followed out, and that I may be allowed part in an investigation, the interest of which is to me personally far beyond that of anything in the country, and to



the understanding of which I have already devoted more than five years of study.

No one can visit Jerusalem without being impressed with the courage, endurance, and ability which must have been necessary to enable Captain Warren to vanquish the difficulties he had to encounter and to collect from such a depth of *débris* the valuable data we now possess. In the Haram enclosure there is but very little of importance which he has left to be done. To a few points specially indicated by him I have turned my attention, and have been able to make a more minute survey of the surface of the Sakhrāh than seems to have been possible before. One point of the greatest interest yet remains unsolved: the Well of Spirits below the rock is still a mystery, but great advances have been made in facilitating such investigations, and we need not yet despair of final success. Time will work wonders, and it must not be forgotten that money will do even more.

There are yet two subjects of the most paramount importance to be examined in Jerusalem, and the interest they excite is not, I believe, at all diminished. The first is the claim which the venerable Church of the Holy Sepulchre asserts to be considered the true site of the Saviour's tomb; the second is the discovery of the royal sepulchres, in which David, Solomon, and their successors lay embalmed. It must be pretty generally understood by members of the Fund that the first question hangs on the discovery of the site of the starting-point of that "second wall" which at the time of the Crucifixion was the boundary of Jerusalem. I have already submitted to the Committee a plan for its determination, based on the apparently obvious method of finding the first wall first, and have been given to understand that its acceptance was only delayed by want of funds.

As regards the tombs of the kings, I know of but one indication on which to work. Benjamin of Tudela, a traveller less credulous and ignorant than most of his immediate successors, graphically describes their accidental rediscovery in his own time by masons employed in the time-honoured custom of destroying ancient monuments by the demolition of the old Zion wall. Allowing for the natural exaggeration for which terror, darkness, and the rush of innumerable bats may account, there is but little reason to discredit the account. My proposal for the refinding of the tombs was to follow the example of these mediæval workmen, starting from a fixed point at the modern Bishop's School, and tracing the Zion wall northwards and eastwards—towards the city, and towards the ancient Ophel wall already discovered by Captain Warren.

As regards the question of funds I have but little to say. The expenses of the survey are reduced to a minimum, and it has again and again been shown to subscribers that an increased yearly expenditure for a shorter time is far more economical than the continuation of the present rate of work and of outlay for a period of five to six years. The Committee have been able to add one more member to my

party, but this is hardly sufficient to enable me to carry out the double party which I had hoped soon to organise. It must be remembered that this is simply a question of health. The climate becomes more trying to a European every year he remains in the country, and should the Society lose the services of either Sergeant Black or of Corporal Armstrong, now trained to the work and thoroughly competent, and lose them by failing to lighten and shorten their work, they will find it very difficult to supply the place of either without damage to the character of the work.

Could funds be collected for work in Jerusalem I should advise a partial break in the survey, for the reason that, situate as we are in remote corners of the country at a time when travellers are thronging into the city, the work of the Fund is but little known, and the large amount of interest which might be excited by a few tangible discoveries, which might be seen by every visitor, is entirely lost.

In conclusion I may be allowed to direct the attention of the meeting to the valuable services rendered to the Fund by many residents in Palestine.

The interest taken by Dr. Chaplin in our work, the care he has shown to keep it before the eyes of the world in this country, when we were unable to speak for ourselves, his long experience and great knowledge of every antiquarian subject connected with Palestine, without mentioning his unvarying courtesy and kindness, have been of the greatest service to ourselves and the Fund generally.

In Herr Konrad Schick the Fund has also a most valuable representative. His patient labour, and the advantages he enjoys from his position in Jerusalem, have enabled him to do work which it would be impossible for any others to do. The diagram of rock levels throughout the city, which he has kindly prepared at my request, is probably the most important basis on which to begin a study of the ancient topography that has been obtained since Captain Warren left the country.

I have already spoken of Dr. Kersten, and must recognise the kindness of Mr. Zeller in supplying us with a list of names in the centre of Palestine, and in guiding us to the discovery of several important antiquities, which we could not have found for ourselves.

From Mr. Elkavy, the Protestant missionary at Nablus, we also obtained a similar list, and received kindness and hospitality which were most acceptable in our long journeys through the country.

The general courtesy and ready help which we have met with from Europeans in all quarters, and especially from Mr. Moore, in the arrangement of our little local difficulties, is also worthy of the gratitude of the Fund; and in conclusion my own personal thanks are due to Captain Wilson and Captain Warren for their kindness in supplementing my inexperience by their own professional knowledge and advice.

The CHAIRMAN: I can unfeignedly say that I occupy the chair here

to-day with something of shame and regret, because I wish that some one of those who have taken an active part in this work which we have carried on now for several years could have replaced me on this occasion. I fear the sound of my voice must be a weariness to you; but my right to stand here consists in this,—that I feel that I represent the general public who meet once a year to encourage the active workers in the scheme, and to hear from them what they have done. The Fund has now expended a sum approaching £20,000; and for the first time we are obliged to say we feel a prospect of that alarming thing called a deficit. £20,000 is a large sum; but when I think how easily this nation gets rid of £20,000 for objects which have no great meaning after all, I cannot help urging the claims of this Fund, because we think the country can well afford it, and we think the object we have in view—that of making the words of the Sacred Book better understood—is a noble object, and one that is especially worthy of the people who have done more for the circulation of the Bible than any other people in the world ever did—the people of Great Britain. And when I say that we have expended £20,000, large as that sum is, I do not think the work will stand still because we have spent a great deal upon it. The object we are now engaged in is more interesting to men of science and cultivation than to the general public. History has something vague and unreal about it until you know the geography of the country in which the events of history have taken place, and not until you have a perfectly good map upon which the actors may stand does history become a reality. Well, it is the making of a perfect map of Palestine which has occupied us in the last year—not a map in which conventional mountains are laid down, nor yet a map constructed in that older fashion where monsters were exhibited as occupying large districts which were left blank—but a map which shall be a true picture of the country as it is now. One-fifth of this work is accomplished, as you will see on reference to the map before you, and you have therefore to do the rest. We have to regret that this Fund has lost during the past year two of its most excellent friends and supporters. Last year, on a similar occasion to the present, my much-esteemed and valued friend, Viscount Ossington, addressed the meeting. No man in this country took a greater interest in the cultivation of the people, and as you are aware, he gave us the benefit of his support because he thought this Fund would do much to cultivate a knowledge of the Scriptures. Again, one of the best scholars we had among us at our former meetings was Mr. Emanuel Deutsch. He also has been taken away. His Oriental learning was extremely great: not a son of this nation, he was ours by adoption, and at all times took a great interest in the affairs of this Fund. Well, we have completed during the year one-fifth of the Survey of Palestine, and we have put forth a new book—“Our Work in Palestine”—which the public evidently takes a great interest in—since it has purchased to the extent of 5,000 copies in a few months. This is a matter of congratulation to us, because the circulation of this book will do more to show what this

Fund has undertaken than the speeches here or anything else, because it contains the travels and actual discoveries of the Fund's officers, and because it also gives conclusive evidence that the field of research is immense. Regret has been expressed in the Report, and very naturally, that we have left our work in Jerusalem for the present; but we hope to go on with it again. M. Clermont-Ganneau wishes to devote his time and attention to the researches promoted by this Association. There are difficulties in the way, but we trust that those who wish that Jerusalem should have a large part of their attention will be able to have their wish gratified. I will not trespass on you, or prevent other speakers addressing you, but I will remind you that this Society is established for the promotion of the study of God's holy Word; and it has done a good deal in that direction—first through the volume which I hold in my hand, and in the second place, as you will see by a glance at that map, in the Survey of the country, and, as you have heard in the Report, by the prospect of its completion. There is a third point which should not be forgotten. Every society of this kind, besides the direct work which it does, promotes other work of the kind: it is like a beam of light; though the ray of light itself is straight, it diffuses.

Something should be said here of the researches of our excellent friend Canon Tristram in the land of Moab. His work on that land will show you what it is, and the kind of hopes that will rise up in the minds of travellers in connection with this Society. He discovered some ruins, for instance, where he found a temple of great magnificence and beauty, though for the most part ruined. But it was more than a beautiful temple: it belonged to no existing style of architecture, and was full of rich decoration which could not be classified. Imagine how our friend Mr. Fergusson would gloat over such a discovery. To connect this with any form of architecture a link was wanting. This Canon Tristram found. In a little church in Italy he discovered a triangular ornament, and there, behold, he recognised this fragment which he found in the Persian temple of Mashita. Now the question which it is my duty to put to you is, Will you help us a little more on the ground of what has been done? Will you help us to prosecute these researches a little further, to illustrate the Book which is foremost in our interest and chiefest of our studies? There are plenty of results to be obtained, and if you will give your time and your money to the cause a great amount of success is certain to follow. (Cheers.) I ought to have called upon Mr. Tyrwhitt Drake himself to read his report, but he is not here to-day, and we are afraid he is unwell. I am, however, now going to mention a name which deserves the highest honour in connection with this subject. I will call upon my friend the Dean of Westminster to move the first resolution. (Loud cheers.)

The VERY REVEREND THE DEAN OF WESTMINSTER: My Lord Archbishop, Ladies and Gentlemen,—The first resolution which I have the honour to move is this, "That this meeting, having heard with satisfaction the Report presented by the Committee of the progress of the Survey



of Palestine, and of the operations of the Fund in other directions, pledges itself to use its utmost endeavours to raise the necessary funds to carry on the work to a successful conclusion." Like the Archbishop, I have so often addressed you on these occasions, and so often used the same arguments, that I have the same diffidence in referring to them again; but, nevertheless, one peculiarity of this Society is that it is perpetually discovering something fresh, and so supplies both your Grace and myself, and other speakers, with fresh arguments on the objects it has accomplished. No doubt it is true, as has been said in the Report, and as your Grace has said, we have a little wandered from the original field of our object, the exploration of the city of Jerusalem; and I have never wavered in my opinion that this is the part of Palestine which most demands exploration and investigation, and which is most likely to yield permanent and unexpected fruits; but the very fact that we have this chief object always in advance of us is like the Holy Grail pursued by the Knights of the Round Table, and may have the advantage of reminding us that, whatever other investigation we take up, and however long we put off the exploration of Jerusalem, this ultimate goal is before us as a perpetual incentive. I now turn to what has been done in the last year towards the completion of the map of Palestine; and there are one or two things which occur to me to say on looking at that map. When I look at that black line which indicates what we have accomplished, it is interesting to think that our Society has done so much, for in one sense that is the most interesting part of Palestine. But to me personally it is the least interesting part, because I know it best. What I want to see explored is not the western part of Palestine; I am burning to see that which I do not know, and what I do desire to see is the completion of the Survey on the east of the Jordan; the extension of that black line to the end of that blue streak, which represents the chasm of the Jordan Valley. We are in the habit at these meetings of using a little exaggeration in saying that very little or nothing has been done by previous travellers, but I think that is an error. In a general sense we do know a great deal about Western Palestine. No doubt even there we want precise knowledge. Nevertheless our enemies, if there be such wicked people in the world—our enemies might say that of the western side of the Jordan we have a very fair knowledge. But when you pass that black line, and cross the valley of the Jordan, we know—I am not sure whether I ought to be sorry to say it—but we know very little indeed. I may just mention one single instance, if you will allow me, to show you the incompleteness of our knowledge of Eastern Palestine. One of the most interesting scenes in sacred history is the meeting of Jacob with his brother Esau, as described in the book of Genesis; and never having been on the east of Jordan, I wished to make out exactly what the place of that event, and the nature of the scene, and in the first instance the precise nature of the valley of the Jabbok. But on turning to the word "Jabbok" in Dr. Smith's Dictionary of the Bible I found that all reference to the peculiarities of the stream, or indeed to



the scene itself, was entirely passed over. I then went to the Speaker's Commentary (and in mentioning that honoured name I would add the echo of my humble testimony to what your Grace has said of the great loss we all sustained), but here there was not one word of explanation of any kind. I then looked to books of travel which have touched upon it, but not even with the help of these could I form to myself any fixed, certain notion of what the place was like. I mention this because this was an incident that would certainly be brought out in a map, and we should have the whole thing placed before us very differently to the inadequate way in which it is put before us at present. So much for a negative proof of what we want. Now let us give two positive proofs of what may be gained by exploration on the east of the Jordan. I refer with great pleasure, in his presence, to Canon Tristram's "Land of Moab." I will not here repeat what your Grace has said of the Palace of Chosroes. I will only say that the discovery of the palace of that great king of Persia is most opportune at the moment that his successor is landing on our shores. But there are two localities described in that book which are connected with the Old and New Testament history. One is Callirhoe, the hot or cold bath to which Herod the Great was brought at the end of his life, which has only been described, and that but slightly, by one previous traveller, and any spot more romantic, more beautiful, than this wild glen, as represented by Canon Tristram, I cannot imagine. The other is Machærus, the castle in which John the Baptist was beheaded; most interesting on that account alone, but which never has been described before by any one. I am therefore thoroughly satisfied that the completion of this Survey is one of the most important things we have to do. I will only, in conclusion, say that I am glad we have been able to enlist another nation than ourselves in this great object, in the person of M. Clermont-Ganneau, and although we shall always have the credit of having commenced this Fund and kept the fire burning, yet we do not grudge other nations the credit of any assistance they may give in carrying out what we have begun. (Cheers.)

Mr. WALTER MORRISON: My Lord Archbishop, Ladies and Gentlemen,—I have been called upon at a very short notice to second this resolution, and to supply the place of Mr. George Grove, whose name is so well known to Biblical scholars. Mr. Grove has been unavoidably kept from coming here to-day, as we have received a message from him to state, by that cause which is upsetting all the arrangements of English society—namely, the Shah of Persia, who, as you are aware, is going down to the Crystal Palace next week. We have also much to regret the absence of Mr. Tyrwhitt Drake. We arranged this meeting at a time when we fully expected him, but, as you know, the climate of the East is one that tries and tells upon European constitutions. It has been necessary for him to come over for his health's sake, and he arrived at Trieste on Tuesday last. We have sent a telegram to him, but no answer has come, and we are afraid that he is laid up by some serious illness. Coming now to the resolution which it is my duty to second, let me refer to

the remarks which have been made by the Dean of Westminster as to the change which has taken place in our operations. This change has been pressed upon us by many of our subscribers. When we established this Society seven years ago we set before ourselves three objects—one of which was the preparation of a map of the country, and we thought those who would have joined us required something in return for their money in the way in which they would like to see it expended. And another reason which influenced the Committee when it was proposed to change our plan of operations was, that we have been in the habit of receiving subscriptions from our cousins across the Atlantic. They, however, suggested that they had better get up a society of their own; we therefore offered to divide the Exploration of Palestine with them, and offered them the East of Jordan. After we had done that came the discovery of the Moabite Stone. Our American friends were anxious to explore their part of the country, and we felt that we had no right to trespass on their portion of the Survey. However, we have gone on with our work, and out of 6,600 square miles of country Lieutenant Conder has finished the survey of 1,650 square miles, and I think that is not an unsatisfactory amount of work to have finished during the comparatively short time we have been at work. Roughly speaking, Palestine is about the size of the principality of Wales, and if you will come and look at the work on this table you will find that there is no shortcoming to be complained of at all. You must recollect that our surveying work is not merely confined to the part within that black ribbon, because it includes the part completed by Major Wilson and Captain Anderson, and portions of the Jordan Valley surveyed by Captain Warren, the Admiralty Survey, with Lynch's Survey of the Dead Sea, so that even if we were to come to a termination of our Survey now we should have a much better map of Palestine than could have been thought of ten years ago. I have the honour to occupy the position of Treasurer to the Fund, and I would ask the meeting to think especially of the concluding part of the resolution which I have seconded—namely, that it “pledges itself to use its utmost endeavours to raise the necessary funds to carry on the work to a successful conclusion.” In changing our observations from Jerusalem to the Survey of the country we have gone aside from a sensational work to one of a different nature, because it requires a certain amount of thought and abstraction to realise the difficulty of completing a survey of this kind. Palestine has been frequently visited in recent years, particularly by tourists, who pass through the country every year, but until we commenced our excavations travellers only passed along the main streams and the beaten tracks. One of the incidental advantages of our Survey is that we can prove a series of negatives. Thus we have shown, which is in itself a most valuable piece of knowledge for future explorers, that there are certain districts in which nothing can be discovered. When we cover Palestine with triangles of fifteen miles from point to point it is extremely improbable that anything

of importance can escape the attention of the explorer, and when a given district is thus thoroughly explored, it is a guide to future explorers not to wait there, but to seek elsewhere. On the other hand, if ruins are found which have never been visited before, it is likely that they will give a clue to identify other sites as well. With regard to the proposed arrangement with M. Ganneau, he is one of the most competent men to make discoveries in the Holy Land; he is a man of recognised ability, and has long had an official residence in Palestine, and has since been made dragoman to the French Embassy at Constantinople. He has first of all the advantage of knowing intimately the current dialect of Palestine, he has been accustomed to deal with the people, he knows who to put questions to, and how to get information without putting leading questions; and it would be of the utmost value that Mr. Tyrwhitt Drake and Lieutenant Conder should have a gentleman like M. Ganneau to support or criticise the conclusions to which they have arrived. This matter, however, is still *in nubibus*, and it depends on the French authorities whether we shall have his services or not. I can say no more at present, except that I hope those present will endeavour to persuade their friends to come forward to help us with the work we have in hand. It is true that our funds are not in a satisfactory state, but we are committed to the work, and must go on with it, and I hope the public will come forward and prevent us from being disgraced. (Cheers.) The resolution was unanimously carried.

THE REV. CANON TRISTRAM: The resolution which I have the honour to move is this,—“That this meeting hails with pleasure the announcement that a preliminary American Expedition has commenced its work of exploration on the east of Jordan, and trusts that the two sister Societies will always continue to work heartily together.” I might almost say that my friend the Secretary had had a little satirical humour in his mind, in selecting me, who have just been pioneering east of Jordan, to propose this resolution; but I do it with a good feeling, and with a cordial conviction that our American friends are likely to do a good work in Palestine, and that they are the men to do it. Four-and-twenty years ago, when I was in America, and when the rush was made to Minnesota and Iowa, no attention was devoted to the east, but every effort was made to get farther west; but now we find the Americans have reached their western limits, and, turned back by the waves of the Pacific, have determined to be foremost in the eastward march. I do not know that they will get ahead of us in that way, for we have been the real and true pioneers in Palestine exploration. Yet there are no three men of modern times who have done so much in their several departments, and who have done that work so well, as Dr. Robinson, Lieut. Lynch, and Dr. Thompson, and they were Americans. Right glad, therefore, are we to find that their mantle has descended on worthy successors. Let not our Transatlantic cousins fancy that we have forestalled them in Moab. Though I have just returned from an expedition thither, I feel our party have only been as Uhlans prospecting the

ground, and making a *reconnaissance* for the regular army of explorers that is to follow. We have at least, I hope, drawn attention to the work that remains to be done east of Jordan, and which I fancy rather exceeds the expectations even of my friend Mr. Besant himself. Of the eleven cities up to this time unknown, we have only succeeded in placing four, leaving still seven for the investigation of the American expedition. Again, south of the Arnon and eastward of the Moabite mountain range, the ground is quite untouched, and the followers have a virgin field. I have great pleasure in moving—"That this meeting hails with pleasure the announcement that a preliminary American Expedition has commenced its exploration on the east of Jordan, and trusts that the two sister Societies will always continue to work heartily together."

DR. BIRCH: My Lord Archbishop, Ladies and Gentlemen,—It affords me great pleasure to rise to second the resolution. At a former meeting of this Fund I seconded a similar resolution; and I am gratified to find that the American branch, or sister Society, has undertaken the investigation of the country east of Jordan, and that they are willing to deal in a most liberal spirit with ourselves. With Palestine proper, as has been well detailed by the Dean of Westminster, the world is well acquainted. There were, however, some peculiarities about the ancient Hebrew people. I believe they did not use inscriptions so extensively as other nations of the world; and few have been found in Palestine itself; but it is not so in Moab and east of Jordan. Only there is one caution necessary to be observed. If there are any spurious monuments, or monuments of doubtful antiquity, it will require not only considerable learning, but considerable archæological experience, to avoid being defrauded. Some of the things, sketches of which are now exhibited in the Dudley Gallery, profess to come from Moab, and the question is how far that is true. The country east of Jordan is, of course, a country of extreme interest, and it is to be hoped that the Surveys of the two Societies will be carried on in the same manner. That, I have no doubt, the Society has arranged. It is also to be hoped that they will note all the monuments they find, and collect such fragments as may be discovered in order to fix dates. The difficulties of exploring Jerusalem are very great, because you must go under the rock, and great obstruction must arise in carrying on operations under such conditions. Jerusalem is a city which has been subject to an infinite number of adversities. It seems to have been swept of ancient remains, and with the exception of those of the Roman period very few remain, particularly of the times of the Kings. Some, however, have been found, and there is no reason why other monuments may not be found in future explorations. At the same time the portions hitherto explored have not been very prolific. For these reasons I think we ought to hail with the greatest satisfaction the work carried on by the American Society, and wish them God-speed upon their way. (Cheers.)

The proceedings ended by a vote of thanks to the Chairman, proposed by LORD ALFRED CHURCHILL, and seconded by Mr. MACGREGOR.





THE  
PALESTINE EXPLORATION FUND.

---

PREFACE.

THE report of Lieut. Conder, dated June 21st, 1873, contains an account of the filling up of the Survey west of the watershed to the old boundary, leaving only a few weeks' work on the Plain of Sharon. From the work Mr. Conder has selected twelve places (plans and sketches of some of them have since been received at the office) for special report: of these only two sites were previously known, and the identification of the remaining ten remains to be ascertained. The remains at Dayr Asruhr are exceedingly interesting, especially if, as Lieut. Conder thinks, they prove to be of Herodian date. It is illustrative of the need of such a Survey as ours that this splendid ruin, standing on a hill only ten or twelve miles from Nablûs, should have wholly escaped observation. It consists of a street with houses, cisterns, and towers, a public building of some kind, and the remains of a wall. These ruins will probably be visited again. At Dayr Allah our party found the ruins of another Roman town, but not in so good a state of preservation. Tombs of three kinds (see *Quarterly Statement*, Jan., 1873, p. 23) were found at Kh. Fakhakhîr; buildings of apparently Roman date were found at Karâwa ibn Hassan. Sergeant Black discovered also here a very remarkable tomb called the Dayr el Derb, while Corporal Armstrong discovered another equally curious, though not so large, at Kh. Kurkush, in the wildest part of the hills. The tombs at Abûd described in this report were visited by Major Wilson in 1866, as was also Tibneh, where is the traditional tomb of Joshua. Lieut. Conder's account of this will be read with the greatest interest. We must call attention especially to his tracing of the old Roman road. Those who have read the volume issued

last year by the Committee, "Our Work in Palestine," will remember the Roman road in the old map, there reproduced from the *Tabulæ Peutingerianæ*. It branches off at Gophna (there spelt Cophna), and while one road continues straight through Neapolis to Cæsarea, the other strikes west to Lydd (Luddis), and then turns north to Cæsarea. It was by this latter road that Saint Paul was taken by night to Antipatris (Kefr Saba). Captain Anderson surveyed it as far as Abûd, where Lieut. Conder has taken it up and traced it in its two new branches, both of which are rudely represented in the "*Tabulæ*," till he lost them in the plains.

Our illustration this quarter gives the result of Mr. Schick's long-continued examination of the rock levels of Jerusalem. It contains the rock levels found by Major Wilson, Captain Warren, Mr. Schick himself, and the latest work in the city. From these observations, about two hundred in number, Mr. Schick has constructed a model, now in the office of the Fund, and Lieut. Conder has made the contour map of the city which accompanies his memoirs on the subject.

The notes on Lieut. Conder's Baalbec report do not properly belong to the work of the Fund, as Baalbec lies out of our district. It may be remembered that more than a year and a half ago letters appeared in the *Times* calling attention to the danger threatening the columns, and it was then resolved, before the American Expedition went out, that the officer in charge of the Survey should be asked to report, whenever practicable, on the actual condition of the ruins.

Mr. Tyrwhitt Drake, whose health required a visit to England, has now returned to Palestine completely restored. M. Clermont-Ganneau goes out immediately. He will begin his work at Jerusalem itself.

---

# THE SURVEY OF PALESTINE.

## LIEUT. CLAUDE R. CONDER'S REPORTS.

### XIV.

#### BELAD EL JEMAIN TANI BENI SAB—UNEXPLORED COUNTRY.

BEYROUT, *June 21st, 1873.*

*Report of Progress.*—Since reporting on the work done up to our camp at Mukhalid our time has been so fully employed, the amount of work so large, and the rate so rapid, that I have been altogether unable to attend to anything beyond the management of the field work and of the expedition generally.

The rate of work has been very satisfactory, and far beyond anything I expected with my original party. The country gone over is almost entirely unknown, and thus I hope the present report will be of greater interest than any I have yet sent in.

Leaving on the 7th of May our camp at Mukhalid, we established ourselves at Kefr Zebad Bidyeh and Rantis, breaking off work finally on the 7th of June, and retiring to Lebanon to pass the hottest portion of an exceptionally hot summer. In that time we succeeded in bringing the work back to its old boundary, filling in all the hill country W. of the watershed, and only leaving some three weeks' work in the plain of Sharon, which Dr. Chaplin forbade us to undertake so late in the year. The Ordnance Survey thus extends over 1,800 square miles, 3-11ths of the whole area of Palestine, whilst the monthly rate since leaving Haifa has been close upon 180·89 miles, being treble that originally obtained, and an increase of nearly 30 per cent. on the maximum which I was able to reach last year. This result cannot fail to be encouraging to all concerned. Were my party doubled by the addition of one more N.C.O. before the recommencement of our work, I think I could almost promise an average rate of 240 square miles per month, which would represent the completion of the map in two years, working ten months in the year.

The following plans and sketches are obtained, and at Damascus I hope we shall have time to work them out.

1. *Dayr Asruhr.*—Remains of a large town, probably of Herodian period. Plans of the two principal buildings. Sketches of detail. Special survey of the whole site. Plans of rock-cut tombs.

2. *Kh. Kurkush*.—A cemetery of well-finished tombs. Plans, sketches, measurements of details, &c.
3. *Karāwa ibn Hassan*.—Plan and sketches and details of a very fine tomb, well preserved. Plan of a church (?). Two crusading buildings in the town.
4. *Mokat'a Abud*.—A cemetery of well-finished tombs. Plans. Measured sketches of detail. Painted interior, well executed in cement. Greek church in village.
5. *Tibneh*.—Special survey of the site of town. Plan of so-called Joshua's tomb. Sketch of the exterior.
6. *Dayr Kalu'ah*.—A finely-preserved 5th century monastery. Plan, elevation, sketches of detail, ornamentation of chapel, &c.
7. *Dayr Sam'an*.—A similar building, less well preserved. Plan and details.
8. *Dayr Arrabeh*.—A similar building. Plan alone traceable.
9. *El Duayr*.—Similar building, but smaller plan traceable.
10. *Kh. Fakhakhir*.—Tombs, and a building, possibly a synagogue.
11. *Dayr Allah*.—Remains of a town, with a small temple, close to the Roman road to Jaffa.
12. *Nebi Yahyah*.—Plan, section, and measurements of all the details.

Of this list of places visited, surveyed, and measured during the course of one month, only two sites were previously known, the rest are, I think I may state with some certainty, quite new discoveries. I am sorry I cannot add an inscription to the list.

In geology we have found two more basaltic outbreaks, and collected some valuable fossils.

The reasons for the increased rate of work are various. The triangulation has occupied much less time than it did at first, because the triangles have been larger, the points therefore fewer; because on the east we had a number of old points which it was not necessary to visit in order to be certain of their suitability, and because of a very strict economy of time in the arrangements, the number of days consumed by this part of the work being reduced to a minimum. Then, also, the detail has been more rapidly pushed on, partly because of greater practice, partly by reason of the large tracts of sandhills along the sea-coast, which can be very rapidly surveyed. The addition of Corporal Brophy to the party cannot be counted, as he has not as yet been able to assist; nor does the execution of a share in the sketching by myself from the last two camps make any very large difference; the work as it stands is that of the original party of last year. Against the facilities of work must be balanced certain disadvantages: the unusual number of plans and special surveys which it was necessary to make; the greater heat on the low hills and in the plains, with mirage consequent to it; finally, the extremely wild and difficult nature of the country through which we passed last.

A short description of the principal sites mentioned in the above list may prove of interest; they include towns, cemeteries, roads, and convents.

*Dayr Asruh.*—This interesting site, for which I obtained four various names, of which that chosen seems to me the most probably ancient, is situate on a hill about ten or twelve miles W. of Nablûs, in a fine and commanding position. It seems to have altogether escaped notice, and perhaps from this reason is in a better state of preservation than any similar ruin in the country. Of the character of the details an archæologist alone can judge, but I think I may venture to assert that it dates as far back as Herodian times, an opinion strengthened by the discovery of a much-defaced bronze coin of the time of the Roman emperors—the reverse a wreath with S C, the obverse a head.

The ruins occupy about a square mile, and seem to have been surrounded with a wall. A large building facing north and south exists at the north-west corner of the town, and a second, facing at 107° on the compass, is found on the east. The north wall of the former is standing in parts to a height of 23ft., and a fine solid semicircular arch, 14ft. span with 13 voussoirs, marks the position of an entrance. The rubbish in this part, which is level with the springing of the arch, must be of some considerable depth. The site, if identified, might be worth special study and excavation. The wall consists of stones of fair size, well cut and laid. The height of the courses is very irregular, and many stones are of great length as compared with their height. Of those measured at the corner the length varied from 5ft. 3in. to 1ft. 6in., and the height from 1ft. 11in. to 3ft. 5in. They all appear to have been drafted, a well-finished shallow draft, 2in. to 3¼in. broad, the central boss being well worked to a perfectly plane face. In many cases the draft is hardly traceable from age, and this, in connection with the finer finish, the unusual proportions, the semicircular arch, and the flat lintels and classic mouldings of the doors to the rest of the building, make me suppose the masonry far older than the coarser and rustic work of the Crusaders who built Athlit and Casarea. The building seems to have been unsymmetrical in plan, with a large hall leading through to the southern door, the jambs of which still remain, whilst on the west three entrances led to smaller apartments. The east wall is not traceable above ground.

Passing along what seems to have been a street, with well-built houses, cisterns, and small towers, the foundations alone remaining, we find on the east the remains of what I suppose must have been a public building, though it can hardly have been a temple, facing, as it does, roughly westward, but not exactly to any cardinal point. It appears to have stood in a court, surrounded by a terrace wall of fine masonry; the walls are still standing for two or three courses, and are nearly 7ft. thick. The building is 65ft. long and 44ft. broad, the most curious detail which one at first notices being two great blocks nearly 10ft. high, but only 2ft. square, which stand up *in situ* at the north-west and south-west corners. Their bases are below the general level, and are ornamented with a classic moulding.

I should imagine that the floor within this building was at a higher



level, and that steps originally led up in front, but the accumulation of rubbish does not allow of this being well seen. A cross wall forms a sort of porch or Pronaos, thus giving the impression that this was a temple. A large block fallen within measures 11ft. in length. Various shafts, about 2ft. diameter, lie without, hence one is led to suppose that there were three walks about 10ft. wide, as thus only could the width be spanned; excavation might bring to light the bases of these pillars. I noticed a curious indented joint or joggle in the exterior wall, of which I retained a sketch; it disturbs the horizontal joint as well as the vertical. We further found a stone, 5ft. long and about 2ft. square, with a flat pilaster cut on either side, with a base and capital of debased, or Jewish classic appearance, cut in low relief. From its size this must have either belonged to a window or to a set of pillars in a second order, or clerestory. Remains of a tessellated pavement also exist. This building stands above a deep broad valley, on the opposite side of which are well-cut rock tombs, with loculi placed parallel to their walls—the cemetery of the town. Following the wall we find cisterns, birkets, a small tower of stones over 10ft. long, and a little vault or tomb into which two columns have fallen. Vaults are said to exist below the town, but this is unlikely. On the south-west and west the rock is scarped below the apparent remains of a wall, and a projection in one part seems to have supported a small turret.

These notes, I imagine, will lead to the conclusion that we have here recovered an interesting and perhaps important site.

*Dayr Allah.*—This also seems to have been a Roman town, but smaller, and with no signs of such fine buildings having existed in it. The ruins extend over about 300yds. length and breadth, the principal being walls of fair-sized stones undrafted, and a door with a plain lintel 7ft. long. Two bases of pillars belonging to some building facing east remain, they are 6ft. apart, and 19½ in. diameter. Several shafts and capitals of a very curious character lie near. This appears to have been the temple.

This site is situate close to the Roman road, which we have now traced to the plain, the famous road to Antipatris which Captain Anderson surveyed as far as Tibneh. From this point it continues along the ridge until it arrives near the village of 'Abud. Here it separates into two, the first passing along the ridge and leaving, just to the south, the tombs of which I shall shortly speak, descending a broad valley and continuing its course till it reaches the plain near Mejdél, south of Ras el 'Ain; the second descending at once from 'Abud, and passing Rantis and Dayr Allah, is lost in the plain. This branch evidently led from Jaffa, and formed one of the lines to Jerusalem, a second more direct existing farther south.

Nothing is more striking than the contrast between such a road and the modern Arabic highways. The Romans, as well for military as for engineering reasons, followed the ridges, avoiding the highest points, and gradually descending the valleys where necessary. The masterly

manner in which they are engineered in a country so difficult as is the mountain district of Judæa might give valuable indications for the construction of future roads, which might be simply reconstructions on the same line. An Arabic road meanders in a meaningless manner over hill and valley, now plunged between heights too distant for the advancing party to occupy easily, then climbing straight over a summit without any very apparent reason. The Roman roads were very carefully made, the rock being covered with a regular pavement of partly-dressed stones still remaining in places. This, with the existence of side walls in some cases, and of broken and effaced milestones, enables us easily to distinguish them. Of all roads they are probably, however, the worst in the country to follow in their present state, as, the pavement being gone, nothing but flat slabs of slippery rock is left, on which the horses stumble fearfully. Another of these roads, leading from Samaria to Kur, has also been recognised by its pavement and engineering. It is doubtful whether they were intended in all cases for chariots, though those in the plain show marks of wheel ruts in many places.

*Kh. Fakhakhir.*—Tombs of three kinds exist here. The ordinary Jewish tomb, with loculi running in from the sides of the chamber; the sunken tomb, with loculi on each side and a heavy block covering it above; finally, a species of tomb uncommon in the country we have gone through: they are cut in detached rocks, and consist of an arch 8ft. diameter and 6ft. deep, thus forming an alcove of a semicircular section open in front. The tomb itself is sunk in the floor of the alcove, and was covered with a slab; a niche for a lamp is generally found at the back. Fragments of sarcophagi, with lids and ornamented sides, exist near, and amongst the ruins is a building about 50ft. square, facing approximately to the cardinal points, and divided into three walks by pillars, the northern row consisting of four, the southern of two, with a partition wall occupying the position of the others. The pillars are 7ft. 6in. high, and 18in. diameter, with base and capital of very simple mouldings in low relief. The plan is rendered irregular by the addition of a small chamber at the south-east corner. In the walls, the foundation of which only remains, a stone was observed 2ft. 6in. long, with a draft of the ordinary dimensions, and a well-finished face. The entrance to the building must have been on the west, but there seems reason to conjecture that this may have been a small synagogue.

*Karāwa ibn Hassan.*—This village was originally named according to the Shaykh Sham el Tawil, and contains two large buildings, probably of Roman origin, the one being a reconstruction, the other an original edifice. The former is a fine tunnel vault, the door spanned by a lintel covered with defaced ornament, whilst drafted and undrafted stones, portions of a cornice, and on one stone an inscription which appears to be Cufic, are built into the outer wall indiscriminately. The second building, forming a modern residence, is a fine tower about 40ft. square,

the walls standing to the height of from 20 to 30ft, and the interior divided into six vaulted apartments, which are used as storehouses; these are all roofed in tunnel vaults, with semicircular arches of moderate masonry. The stones of the outer wall vary in length from 18in. to 5ft., and in height the same; all are surrounded by a boldly-cut draft an inch deep and 4 inches broad; the joints are well laid with a thin bed of good mortar, and the faces are finished plane. There is, however, no further indication of the date of the building, but no rubble such as the Crusaders generally mixed with their ashlar is visible in any part.

A third ruin exists under and beside the mosque, which is a large one, and there seems to me great probability of its having been a church, though subsequently used as a birket. It is now sunk below the surface, which no doubt has risen; it faces east and west, and is built of fine undrafted masonry with slightly projecting pilasters of classic profile; the height of the courses of masonry is very irregular, but the joints are finely cut. A cross wall of later date shuts off the east end at a distance of about 40ft., but a great vault, probably the apse, is reported to exist under the mosque. Fragments of cement adhere to the walls but form no part of the original design.

Within half a mile of this village, where Christian and Roman remains seem thus mingled together, Sergeant Black discovered a tomb, perhaps the most perfect, as a type, in the country, which is known locally as the Dayr el Derb (a meaningless name, probably not ancient). A well-executed frieze of Doric style, the tryglyphs separating rosettes all of different character, runs along the scarped face of the rock for about 50ft.; the porch is supported by two Ionic columns and two Doric pilasters of that peculiar type which Mr. Ferguson refers to Herodian times. The interior chamber contains three Jewish loculi at its further end, whilst two side chambers, one unfinished, were made in the second fashion, with sarcophagi parallel to the sides. The workmanship throughout is excellent, the chambers large and higher than usual; the walls of the porch are cut to represent drafted masonry, as in the Tombs of the Judges. The frieze is not quite finished, and is broken in the middle, whilst one of the side chambers is still imperfect, but with these exceptions a finer and more complete monument I have not yet seen in the country.

It is curious that where so much labour has been bestowed on the work not a letter of inscription was cut to commemorate the distinguished family for whom it must have been prepared; but this is always the case it would seem in Palestine, as in the instances of nearly all the tombs at Jerusalem already known.

*Kh. Kurkush.*—Hidden away in the wildest part of the hills, surrounded with deep ravines, and at some distance from any spring or ruin, Corporal Armstrong came upon another group of tombs, one being almost as perfect as, though smaller and less well executed, than the Dayr el Derb. The principal tomb has the same arrangement, but

is peculiar in having two recesses cut in the sides of the porch; the shafts of the central column are gone, the Ionic capitals remain, the side pilasters are seemingly unfinished, the door is ornamented with a semi-classic entablature in low relief. One peculiarity which is very puzzling is the appearance of a number of rough scrawls cut on pillars and walls in every direction; they represent camels, goats, cows, men riding donkeys, &c., all executed with the charming simplicity of outline generally observed in infantile productions; one would indeed pass them over as the work of wandering Arabs were it not for the fact that on each pilaster the seven-branched candlestick is cut in precisely a similar style. Nor do they bear any resemblance to the simple tribe marks of the Bedouin which occasionally occur over the rock-cut tombs.

*'Abud.*—To the north of Tibneh, on the top of the lower Judæan range, this little village stands beside the Roman road. It contains 400 Greek Catholics in a population of 500, and the cross is roughly painted with other ornaments over almost every door. A church of considerable size, which, though restored, was, as the Khuvi assured me, very ancient, stands in the centre, and at a little distance on a stony knoll above a fine tank full of rain water are the remains of a little chapel. The spot is called Barbára, probably in honour of St. Barbara, and is a shrine to which pilgrims come from all quarters. I was not, however, able to obtain any tradition as to the place.

Following the road north-west for about a mile, we pass the Mokata' 'Abud on the left, another system of very fine and perfect tombs. The porches of the two principal resemble in style that of the Tomb of the Kings at Jerusalem, but they are better preserved, and more profusely ornamented. In one chamber, especially, a hard cement or enamel lines the walls and roof, and is well painted in colours, which, though dimmed by age, are distinguishable still. The spaces between the loculi are painted in panels of red and white; black lozenges and red squares on a white ground are placed above, and a twist of white and yellow on a black ground runs above all.\* On the side where there are no loculi the wall is divided into alternate panels of white and red, but one of these remains unfinished, with three brush marks, showing that the painter had marked it for its proper colour, namely, a dark reddish maroon. The details will be best understood by my drawings, which will be finished, copied, and forwarded at the earliest opportunity. Arab tribe marks were remarked on the walls of the porch, but no designs like those previously noticed were to be found:

*Tibneh.*—A day was devoted to a visit to this interesting and important site. It is unnecessary to remind your readers that it was identified (though not correctly described) by Dr. Eli Smith with the Timnath Serah chosen by Joshua as his inheritance upon division of

\* A sketch of this painting was made by Major Wilson in 1866, and is now in the Office of the Fund.



the land. "Very marvellous," says St. Jerome, "is it that the distributor of the possessions should have chosen for himself so rugged and mountainous a spot" (Epit. Paulæ, § 13), and his words apply to Tibneh very aptly indeed. Of all sites I have yet seen, none is so striking as that of Joshua's home, surrounded as it is with deep valleys and wild rugged hills.

An oval tell with steep and regular sides forms the site of the town. On the south a gentle broad valley separates it from another hill, in whose northern face the necropolis<sup>\*</sup> is excavated; a little plateau below the town stands at the head of this valley, and separates it as a shed from a second descending westwards. The Roman road passes between the plateau and the tell, and not far south of it stands, perhaps, the oldest and finest tree in Palestine.\*

This noble oak, which must be upwards of thirty feet in height, and beautifully symmetrical, is all the more striking to the sight after a residence in a country but sparsely scattered with olives and ballut of no great size. It is covered with foliage, the leaves being very small, and has received the name of Shaykh Taïm from the natives. A modern and an ancient well exist close to it, but the supply of water for the town must have been drawn from the 'Ain Tibneh, a fine spring, breaking out of a rocky channel, on the northern slope of the tell. If, indeed, political or other reasons rendered it desirable for the ruler of Israel to choose this portion of the country for his residence, no better spot than Tibneh could be found, for the country round is destitute of spring water for a considerable distance.

Of the ancient town of Tibneh nothing but a wall of drafted stones, three or four only visible above the surface, remains; the Arab village, which subsequently occupied the same position, being in its turn much damaged by age. The necropolis is, however, still visible, though almost every tomb has its porch so filled with rubbish that only the top of the little door into the tomb is visible. It might perhaps be interesting to excavate these tombs, but it is doubtful whether they are not all choked within as without, though we cannot positively affirm that some have not their doors still intact. Much time and labour would, however, be required.

I am aware that the tombs have been already examined, and that photographs of the ornamentation exist.† I, however, thought best to measure carefully the principal one, and to obtain dimensioned sketches of the details of ornamentation.

*Joshua's tomb.*—This is certainly the most striking monument in the country, and strongly recommends itself to the mind as an authentic site. That it is the sepulchre of a man of distinction is manifest from the great number of lamp niches which cover the walls of the porch; they are over 200, arranged in vertical rows, giving the appearance of an ornamental pattern, and all smoke-blackened. One can well imagine

\* See Photograph, Old Series, No. 107.

† Photographs, Old Series, Nos. 108, 109.



the wild and picturesque appearance presented at any time when the votive lamps were all in place and the blaze of light shone out of the wild hill-side, casting long shadows from the central columns. The present appearance of the porch is also very picturesque, with the dark shadows and bright light, and the trailing boughs which droop from above.

Entering the low door we find the interior chamber to be a square, with five loculi, not very perfectly cut, on three sides. The whole is quite unornamented, except by four very rough brackets, supporting the flat roof. A broad step or divan (for want of a better word) runs round the chamber, and the loculi are level with this; the depth of the centre we were not able to ascertain, in spite of excavation.

On becoming accustomed to the darkness one perceives that the central loculus at the back forms a little passage about 7ft. long, 2ft. 6in. high, and 3ft. 4in. broad, through which one creeps into a second but smaller chamber, 9ft. 3in. by 8ft. 1in. and 5ft. 5in. high.\* In this, opposite to the entrance, a single loculus runs at right angles to the wall, and a single niche is cut on the left for a lamp. Here then, if we accept the site, is the resting-place of the great leader, the stout soldier, the fierce invader, who first brought Israel into the promised land. It is curious that when so large a number of travellers come annually to Palestine so few visit a spot of such transcendent interest.

The simple character of the capitals in the porch, more fitted for the carpenter's work on the tabernacle than for work in a soft stone capable of being ornamented profusely with little labour; the rough execution of the interior, and the non-appearance of the later form of "attached sarcophagi;" finally, the lamps, which adorned the façade, and the absence of any ornamentation similar to that already mentioned in the other tombs, all seem to point to the probability that the monument here described may be as certainly looked upon as Joshua's tomb as may the Modin sepulchre, which I wrote on in a previous report, be considered the resting-place of the Maccabean heroes.

*Dayr Kala'ah.*—This important ruin is shown correctly on Vandervelde's map, although he does not appear to have visited it. I am not aware that it has ever been noticed by other travellers. Standing on the summit of a precipitous hill, it is protected on three sides by deep and intensely rugged ravines, whilst on the east large quarries form a species of moat behind the building. A narrow path leads up to it on the west from a little plain, where no doubt the lands of the monastery lay, and passes under a projecting turret on brackets forming a species of machicouli. The building being erected on the slope, the western foundations are at a much lower level than those on the east, and a square building, with its floor at a level some 12ft. above the main part of the edifice, forms a projecting outwork on the less protected side.

The monastery faces, roughly speaking, east and west, but the wall

\* A plan was made by Major Wilson.

of the chapel has a bearing of 294 deg., which is not less in error from the east line than is the Cathedral of Cesarea. The plan of the building shows a large central hall, about 80ft. in length, having the chapel (which was entered from it by a side door) on the north and a row of buildings on the south. These latter appear to have been chambers or dormitories of various sizes, the walls and even the roofs remaining in some of them. The most eastern, which is divided into two cloisters by a row of piers supporting round arches, I conjecture to have been the refectory, the remainder the cells of the monks.

The tower, some 30ft. square, is immediately east of the great hall, and is divided into four chambers, the roof of one still remaining built in rubble work, with a tunnel vaulting. Above these there was probably a second story.

North of the tower are three large reservoirs, cut in rock during the operation of quarrying for the convent itself, and subsequently completed by the building of massive walls of rubble, faced on both sides with ashlar work, and by an arched roof, the sloping bed for the haunch stones being still visible. The longest of the three is 112ft. by 34ft. breadth. Thus the roof was a work of no little magnitude.

Adjoining the reservoirs on the west side, just north of the chapel, there appears to have been another row of cells, and possibly vaults beneath. These are, however, so much ruined as scarcely to be traceable without excavation.

The details of workmanship and ornamentation leave little doubt that this fine monastery is to be ascribed to the same date as the Golden Gateway at Jerusalem, or the Church of Kalb Louseh, described by M. De Vogüé as belonging to the 6th century. Thus it may perhaps become of great importance to the archæologist, and more especially so if any mention can be found of it either in Eusebius or in Procopius. Mr. Fergusson has traced the gradual history of this early Byzantine style, and M. De Vogüé has shown how slow and gradual the development was in the East as compared with the rapid growth of the Romanesque in the West. The very remarkable architectural feature of a cornice deflected to follow the semicircular arch of a window or door is insisted upon by Mr. Fergusson as evidence of the early date of the Golden Gateway. Here, within a day's journey of Jerusalem, the same feature occurs in the Chapel of Dayr Kala'ah, together with other details of structure not less characteristic. The cornice remains almost intact, though much worn by weather, on the inside of the east chapel wall. Its details resemble those of the Golden Gate, with one exception—the cross appears in every possible place. A broken base lies amongst the rubbish, and its profile I measured carefully for comparison with others of known date. The semicircular arches have already been noticed, and form another important evidence of date. They are all built with keystones. The doors are, however, invariably surmounted by flat lintels, on which the cross is cut in low relief; generally it is placed on a tablet after the classical manner, but in one case

the three hemispheres, which are the conventional method of representing Mount Calvary, form a foundation on which it stands. Above each of these lintels is a very flat relieving arch, formed in some cases of two stones hollowed slightly beneath, thus throwing the superincumbent weight on the jambs of the door. The same arrangement is found on a larger scale at the Double Gateway of the Haram at Jerusalem, where a cornice similar to that of the Golden Gate exists.

The ashlar work of the whole building is finely proportioned and the joints are beautifully laid. The exterior walls have drafts on all the stones, but none are found on the interior. The drafts are different in character from any previously noticed, being about 10in. broad and 2 or 3 deep. The central raised face is often only roughly finished, and the draft itself is not always regular in width or depth. The largest corner stones are 6ft. long and 3ft. high, but the average will be about half these dimensions. On the stones of the interior a number of large rudely-cut marks were visible, but different from the ordinary mason's marks, being placed irregularly on the stone, often two or three together.

Such are the main points of interest concerning Dayr Kala'ah. A thorough search in Procopius ("De Edificiis Justiniani") and in Eusebius ("Onomasticon") is most desirable, as this building must have been of sufficient importance to be mentioned among the works of either Constantine or Justinian, and its date once identified, the evidence of its architectural details would be of the greatest value in the settlement of certain disputes on this style in Palestine.

*Dayr Sam'an.*—North-east of the ruin just mentioned is a second, evidently of similar character, but in a far less perfect condition. The foundations alone are traceable, and show the edifice to have been less extensive and less magnificent. It has, however, one peculiar feature in a large rock-cut circular bath, 14ft. diameter and 2ft. 7in. deep, three steps leading into it from the surrounding platform.

*Dayr Arrabeh.*—Farther south, and not far distant from Rantis, a third convent exists, the walls standing to the height of three or four courses in many parts. A central chapel with a single apse, surrounding chambers, and underlying vaults with semicircular arches, are here found again, but one difference is remarkable, none of the stones are drafted. The doors are surmounted by flat lintels, having various geometric patterns cut upon them, the cross being invariably found in the centre. A large birket exists on the west side, and two cisterns in other parts. It is remarkable that in every one of these sites no other supply than that obtained from rain water can have existed, although there are often springs a few miles off. The fathers seem to have chosen the most deserted and unfrequented spots for their retirement, possibly from other than purely religious motives, as the villages of the wild heathen must always, as now, have been placed in sites where water was most easily attainable.

*El Duayr.*—This ruin, situate near to Dayr Kala'ah, is the smallest

and least important of the four, but is constructed on the same plan. The entrance door to the chapel is very small, and surmounted by a flat lintel. In the other three cases the east door is entirely destroyed as in the two first, or fallen in as at Dayr Arrabeh.

*Nebi Yahyah.*—This curious ruin, more perfect than perhaps any in Palestine, has already been often visited and described. A photograph was taken by Captain Warren, and it is mentioned in one of Mr. Drake's reports. In visiting it for the purpose of making a plan, I found the details to be better preserved than I at first supposed, and took accurate measurements of them all. The whole is in a debased classic style, and the work is no doubt Roman.

The peculiar position makes the original use of the building doubtful, as it neither faces south like a synagogue, nor east like a temple. The bearing of the length of the porch is 253°, so that it faces, roughly speaking, north.

*Nomenclature.*—Although the nomenclature of the Ordnance Survey is not, properly speaking, my own department, yet, as it has during Mr. Drake's absence been entirely in my hands, I may perhaps be allowed here to trench on his ground in a few remarks on the subject.

The method which I have employed is only possible with men to a certain extent acquainted with the language, but appears under existing circumstances to be satisfactory. A native guide or trustworthy attendant is attached to each surveyor. Every name is collected and written in English on the spot, the native in each case being instructed to listen to it. On the close of every day, the names are pronounced in his hearing, in mine, and in that of our head servant, who is able to read, write, and spell correctly. Anything wrong in accent or pronunciation is thus immediately corrected, and all the names written in Arabic, from which I afterwards transliterate them. The final transliteration will, however, depend only on the Arabic letters.

I am convinced that this is, perhaps, the only possible method of proceeding. It was suggested in England that the natives or shaykhs should write the names, but this I found was simply impossible, because not one in a hundred could write at all, and those who could were not to be relied upon for correct spelling. We must remember that even in England the names of the Ordnance Survey are collected with difficulty, as often nearly a dozen different spellings of obscure names will be obtained. When we consider the far greater ignorance of Arab as compared with English peasantry, and the various inducements which fear and hatred of strangers present to lead them to a false answer, it will be seen that to obtain a correct nomenclature is by no means an easy task.

The main difficulties are four. First, that either from a wish to mislead strangers, or from a desire to conceal their own ignorance, or from fear of consequences, or some similar motive, an entirely fictitious name will often been given. Experience alone, and the testimony of



several witnesses, enables us to escape this danger. Secondly, a number of names may be missed by not asking for them, names of trees, plots of ground, small valleys, &c. The only precaution is to instruct the guides to give every name they know in a vicinity, not waiting to be asked. Thirdly, certain names, though undoubtedly genuine, are known to but a few, generally old men. These may very often be obtained accidentally, and are then at once hunted down; but it is difficult to feel certain that *all* are obtained. A very long residence in one district alone would show. Some of them may be important, but the majority are very likely only to be classed with such English names as "Giles's Meadow," "Oak-hill Bridge," &c., &c., which are of no historic value.

The fourth difficulty is in local mispronunciation, which varies considerably, as in England. Thus the Bedouin convert *k* into *g*, e.g., Gagun for Kakun; in other places the letter *kaf* is pronounced *chaf*, and Kefr becomes *Chuffer*, this word being in other districts Kafr or Kufr. These are but instances of innumerable difficulties which have to be overcome, and which require a considerable knowledge of Arabic to understand.

That an immense number of names quite unknown before have been obtained; that in the last month's work Vandevelde's map shows 12 to our 120; that nearly all of these are undoubtedly genuine and correctly placed, is a good deal to say, without committing ourselves to the statement that every name has been recovered, although probably the percentage not collected is extremely small. From experience we are led to conclude that every very prominent object has a name—all villages, rivers, springs, and principal wells; very large trees here and there, mountain tops, pieces of ground of peculiar character, and plains. The principal wadies have, at least, one distinctive name, and opposite to every village the name of the village is applicable; smaller wadies rarely have names. Every ruined site has a well-known name.

As an instance of the manner in which a well-known name may be overlooked, I may instance Bayt Bezzin. This name entirely escaped Mr. Drake, and I only heard it casually in conversation. On a special expedition I obtained the name in various ways from nearly a dozen people. Yet the spot to which it refers, no doubt an ancient site, shows no other marks of ancient work than a large cistern and a few rock-cut caves.

*Water Supply.*—In the study of Palestine there is no question so important as that of the water supply. Everything now depends and always has depended on the amount of water to be found at any place. The question of the ancient fertility of the country, which has often been so easily settled without reference to existing facts, depends also upon this. The Ordnance Survey is a complete answer on the subject. Many fine springs have been discovered in parts supposed to be desert, and an immense number of ancient reservoirs has been marked upon



it. Had the water supply been naturally more abundant in those times than it now is, such reservoirs for collection of rain water would not have been made, and the investigation of the geological condition of the country forbids us to suppose that springs can ever have existed in certain districts. In the greater part of the country lately surveyed the strata are entirely impermeable, and all the water is carried off on the surface. At Mukhalid, however, two springs are found close to the sea, the water being mixed with the salt wave water when the sea is rough. This is accounted for by supposing that the same impermeable bed here underlies the soft tertiary sand deposits of the shore cliffs. Thus the position of springs here, as in all cases, is of the greatest geological importance.

We come, therefore, gradually to the conclusion that the natural resources of the country, though little known, are also little changed. On the other hand there is constant evidence that the amount of ancient cultivation was originally far greater than it now is. The terraced hill sides, often only half ploughed, show laborious energy which is now unknown. Amongst the wildest brushwood of Carmel and the stony hills of the Beni S'ab, we come again and again upon vineyard towers of huge undressed stones, upon old vine terraces ruined and broken down, upon wine-presses and oil-presses of unusual size. It may therefore be concluded that it is rather to the negligence of man than to any deterioration of soil or climate that the desolation of Palestine is due, a fact strengthened by the rich fertility of the country near Beyrout in a soil poor by comparison with that of Carmel or of the southern plains.

*Meteorology.*—The 23rd, 24th, and 25th days of May in this year were the hottest experienced in Palestine for many years. At our camp at Bidyeh the maximum in the shade of the observatory read 106·8 degrees Fahrenheit, against 103 degrees, the greatest heat of last year. A steady east wind blew gently all day, and dropping towards the end of the 25th a dead calm ensued. In the afternoon I was waked by a rushing sound, and perceived a whirlwind, the largest I ever witnessed, quickly rolling towards us down the olive groves, licking up dust and leaves and breaking the small boughs. It passed within a short distance of the tents. A horse and a dog belonging to the expedition died simply from the effects of heat and of drinking too much water. All the natives suffered dreadfully, especially as we moved camp on the first day and had a long march. We Europeans did not feel it excessively, principally from our caution as to not drinking during the day. In the plains two or three men were killed by sunstroke or by thirst. The same heat was felt from Egypt to Constantinople. At Gaza the maximum in the observatory read 116 degrees Fahrenheit. At Beyrout the silkworms were destroyed. All over the country men and beasts suffered severely.

Several phenomena were noticeable this summer in the plains. When the west wind blew, a heavy mist rose in the morning from the plains,



# ROCK SITE OF JERUSALEM,

*With existing Scarps and Ancient Ruins.*

1  
10,000



leaving everything clear at about ten a.m. At about noon, or rather earlier, a sea mist began to come up, and often rendered the observation of objects on the shore line almost impossible.

The mirage was occasionally very trying, but seems to be less noticeable on days when the wind is in the east. I am led to suppose that absolute temperature alone does not affect it, but that a certain amount of damp is required in the air as well. Thus on one day the east wind in the morning gave less mirage than the cooler west wind after noon.

---

## XV.

### JERUSALEM TOPOGRAPHY.

P.E.F. CAMP, BLUDAN, *1st August, 1873.*

I AM at length able to send home the long-deferred plan of rock levels of Jerusalem, which has been from time to time one of the principal points to which my leisure moments have been devoted.

It was Capt. Warren who first pointed out the absolute necessity of discovering in every case the depths below the surface of the rock, and of referring them all to one fixed datum, the level of the sea. In the study of the ancient topography the original appearance of the ground is the first consideration, and although a certain amount of soil must always have existed, and is mentioned as so existing by Josephus, still the ancient surface must have conformed far more closely to that of the rock than it does at present.

For these reasons, almost the first thing to be done in following out Capt. Warren's discoveries was to ascertain the lie of the rock wherever possible. This we are now able to show in about 200 places, thanks to Mr. Schick, who, in his professional capacity of architect, had measured the position when sinking foundations for houses in every quarter of Jerusalem. Being so numerous and evenly distributed, I was able, with the aid of the contours of the surface given in the Ordnance Survey, and with those levels already fixed by Capt. Warren, to extend the system of contours, which he has made for Ophel and the Haram enclosure, over the whole extent of the present city.

By the help of this map we shall be able to calculate within a few feet the maximum depth to which it will be necessary to go in order to reach the rock, and to see how labour may be most easily economised... The comparison of the rock and surface contours shows that the depths will never approach that of the first mines, and may on an average be taken at 20 to 30ft. The Haram stands on a steeply sloping ridge, the Ophel wall hangs over a deep valley, and the great bridge spans another. Thus Captain Warren's work lay in the parts of Jerusalem where work was most difficult and costly. Future excavations would

only have to be made in such parts of the town as preserve at the present day more approximately their former condition.

Thus, although excavation at Jerusalem has been for awhile suspended, the year was not without valuable work. We have a basis now on which to form a judgment of the best way to attack in future the remaining points of interest which no doubt await discovery.

Several new and interesting points at once suggest themselves on an inspection of the map, and to show these better I send a reduced shaded sketch of the original rock site of the town. Reading the famous passages of Josephus by the light of this new map one cannot but be struck with the accuracy of his descriptions.

Jerusalem, he tells us, stood on two hills, the one opposite to the other, divided by the Tyropœon. That crest (λοφος) which supported the upper city was much higher and longer. The other, on which the lower was built, was smaller, and rising to a peak (αμφικυρτος), a description mistranslated "horned like the moon." Besides the Temple hill there was a fourth directly north of it, and divided by an artificial ditch from it, and from Acra by a broad valley, which was filled up by the Asamoneans when they lowered the height of some part of the latter hill which overlooked the Temple.

Referring to the plan we find this description fully carried out. The modern Zion, a large flat-topped hill surrounded with deep valleys, and having a level of about 2,550 to 2,500ft. above the sea. North of this and separated by a broad and very deep valley running down to Siloam, as Josephus describes the Tyropœon, is a much smaller hill, whose summit is not over 2,480, and which, whilst absolutely lower, would appear much more so, because the whole site is, as it were, on an inclined plane, and because the height from the summit of the former to the bottom of its surrounding valleys is far greater than that of the latter.

The Temple hill, already known, will be seen to be separated from a fourth on the north, separated in its turn from the Acra knoll by a broad valley which runs out at the Damascus Gate. We can have but little hesitation in identifying this with the hill Bezetha of Josephus.

Not only is the general description carried out, but several of the details also. The Temple hill was defended, we learn, by a valley and a ditch on the north, cutting off Antonia from the hill Bezetha. This valley Captain Warren traced running north-east and south-east, and coming out just north of the Golden Gate. The rock contour, 2,420 near the north-west corner of the barracks, attests the existence of a narrow trench separating the northern hill from the rocky scarp on which the barracks stand. It is more than probable that the Birket Israel in the middle of the valley, to which the expression of ditch has hitherto been supposed to allude, formed no part of the original design, and that the real ditch thus discovered was cut in that part where no natural valley existed. The rocky scarp south of this, now fixed on the

not mentioned 2,480 in the plan, however, and 2,370 in the highest part!



north, south, and east, will be immediately accepted by many as that scarped rock upon which Josephus tells us the fortress of Antonia stood.

One other very important and curious point remains to be noticed. It will be seen that a narrow ridge runs north and south, immediately east of the Tower of David, and separates as a shed the broad head of the Tyropœon from the western valley of the Birket el Sultan. The former valley deepens very suddenly, and in the line of the church of the Holy Sepulchre its lowest part is more than 100ft. below the crest of the modern Zion.

This is a very important indication, Robinson, Williams, and De Vogüé, with, in fact, almost every writer on Jerusalem topography, have drawn the north line of Josephus's first wall from the Tower of David to the west Haram wall. The great question to be settled is at what point between these limits the Gennath Gate and second wall were to be found. Now no point could be so likely as that marked by the ridge along which the wall would run on ground commanding all without it, and the sudden fall and unsuspected breadth of the Tyropœon valley make it more than doubtful that the line should be carried farther east to cross the valley, when a ridge without the *enceinte* would of necessity command the whole length of the fortification.

Small discoveries continue to be made at Jerusalem. On the cliff in the immediate neighbourhood of Jeremiah's Grotto are a number of rock-cut channels running towards the aqueduct of the royal cavern. These are of importance for two reasons: first, as showing that a part, if not all the water in the great aqueduct, was supplied by the surface drainage; secondly, because this abrupt termination seems to show that the present gap between the scarped rock at Jeremiah's Grotto and the so-called north-east angle of the city wall above the royal caverns is a subsequent alteration. Probably the quarries extended the whole distance, and were cut through to allow a command for the fortifications, which would otherwise have been impossible.

Immediately north of this point other remains of some interest have been discovered by Mr. Schick. There is a rock scarp running east and west, marked on the Ordnance Survey between the contours 2,419 and 2,409, close to a road north-west of Jeremiah's Grotto and near an old cistern. In this scarp a chamber was found square cut in the rock, without loculi, and with two crosses in red paint on its walls. It has been subsequently used as a tomb, and the ground is full of bones and skulls in its neighbourhood. Tracing the scarp, Mr. Schick found indications of piers supporting arches running transversely and parallel to the rock. Near the cistern vaults are said to exist, and in an excavation in the neighbourhood some large stones about 2' 6" x 2', and the foundations of a pier of masonry, are laid bare. There can be no doubt, it would seem, that a large Christian building here awaits examination by the Fund. The only question is what it can be.

The site of the martyrdom of St. Stephen, though now without the

gate (Bab Sitti Miriam) which bears its name, was placed by a very ancient tradition about a furlong without the Damascus Gate. In the middle of the fifth century the Empress Eudoxia erected a church here in his honour, in which St. Saba was buried (Quaresmius ii. 295). Antoninus, of Piacenza, in sixth century, St. Willibald in eighth, St. Bernhard in the ninth, all agree in giving the same position to the site. In the twelfth, the church destroyed by the Arabs was rebuilt by the Crusaders on the same spot. The gate was then known as Porta S. Stephani Septentrionalis. The church was on the west of the great north road, all pilgrims passing immediately by its door; it had a monastery attached, and opposite to it on the east of the road was the Asnerie. "La solait jesir li asne et li sommier de la maison de l'Hôpital pour ce avait à nom l'asnerie" (La Citez de Jherusalem). The church the Crusaders themselves destroyed in 1187, but the Asnerie remained, and was used as a khan by the Saracens, when all traces of the other buildings had disappeared under a dunghill.

From its position and distance from the walls this newly-discovered building may possibly be the remains of the Crusading Asnerie. Ruins of the church may still perhaps exist on the west side of the road beneath the great depth of modern rubbish.

The repairs now going on in the Kubbet es Sakhrâh have given two interesting additions to our knowledge of the place: first, the Cufic inscription on the beams, mentioned by Dr. Chaplin in a late number of the "Athenæum," and sent by him to the Fund; secondly, the uncovering of the base of two of the pillars of the octagon. I have already pointed out in a former report that the "stools" on which the pillars were supposed to stand, and upon the character of which an architectural argument has been partly founded, were nothing more or less than slabs of marble built round the shaft and hiding its base. This is now finally proved by their removal, and a base is discovered within, apparently not belonging to the shaft, as a couple of bands of lead, giving a thickness of  $1\frac{1}{2}$  in., are introduced no doubt with a view of equalising the height of columns of various sizes. From this it would appear that all the pillars of this building are torn from some older edifice, perhaps from more than one, dating probably about the fourth century, and have been placed in their present position by those who built the dome.

The only other work of interest now going on in Jerusalem is the clearing out of the magnificent vaults of the Muristan. Huge piers of stones with a rustic boss are traced down to their rock foundations in the Tyropœon. There are a series of rock-cut steps in part, which seem probably anterior in date to the buildings. Straight joints and other indications point to two if not three distinct dates of building. Mason's marks are found only on the finest and best finished stones. The work, which is a costly and important one, will not be completed for another year.

CLAUDE R. CONDER, Lieut. R.E.,

*Commanding Survey Party, Palestine.*

## LETTERS FROM DR. CHAPLIN.

JERUSALEM, Aug. 1st, 1873. 1

SIX or eight more rafters of the roof of the outer corridor of the Dome of the Rock have been found to have Cufic writing upon them. The words appear to be the same on all, but some are partially obliterated. I send you a copy. The writing appears to be a direction to El Saïdy, by order of El Muktader Billah. Probably this timber was sent down from the north, like that used in the first temple. El Saïdy seems to have been a Mohammedan Helena in a small way. There can hardly be a doubt that this roof was either made or repaired by order of Jafr, and a discovery that I recently made renders it certain that either there was no roof there before, or that it was not on the same level as at present—namely, that there is a very old carved wooden cornice still running round the building in the space between the ceiling and roof of the outer corridor on the inner wall of the latter, just above the ceiling. The accompanying diagram will explain its position. It cannot, of course, be supposed that an elaborate cornice would be constructed to be out of sight.

Another point which I do not remember to have seen noted is that the present cornice below the ceiling rests against the mosaic *and cuts the tops of the letters*, and must therefore be of later date than these.

The reasons which lead me to think it possible that the outer corridor may have formed no part of the original building are these:—

1. The stumpy appearance of the whole building, the base being (at least to my unprofessional eye) too broad for the height.

2. The statement that the Kubbet el Silsileh was the model for the greater Kubbet, which would be only partially true if the latter were originally built of its present form.

3. Such glimpses as we have occasionally got of the masonry of the outer wall seem to show that it is probably of later date, and

4. The certainty that now exists that the roof to which these inscribed rafters belong is of later date than the wall over the arches which form the outer boundary of the inner corridor, and the absence of evidence (so far as I have been able to discover) of a roof having preceded it.

The Cufic inscription, of which I enclose a copy (No. 2), may throw some light upon this question. It is from a stone on the inner surface of the outer wall, and forms part of the ornamental band which runs round the whole building on a level with the tops of the doors. If the date of this inscription is later than 72 of the Mohammedan era, it would afford a strong presumption that the wall is also later, there being no indication of its having been subsequently put in.

I send you also a bit of Greek inscription from a slab from the coping of the parapet of the outer wall of the Dome of the Rock.

More than twenty mortuary chests have been discovered in rock tombs lately opened on the Mount of Offence. I forward plans of the tombs, and copies of the writing on the chests. The latter are neatly executed,

some being plain, others ornamented, but none so elaborately carved as that figured on page 494 of "The Recovery of Jerusalem." Some have flat, others raised lids.

The absence of Christian emblems, and the presence of Hebrew characters, is interesting. I have sometimes questioned whether some of these chests, about whose history so little is known, may not contain the bones of Jews, transported from other lands by pious friends, but I do not remember to have seen Hebrew characters on them until now. On the other hand, the inscription No. 1 might well enough pass for 1610 A.C.

They all contain bones, which fall to pieces on being touched. Entire skeletons *in situ* were also found in several of the loculi, but not a vestige of clothing or (according to statements made to me) an ornament of any kind.

THOMAS CHAPLIN.

JERUSALEM, Aug. 6th, 1873.

By the Austrian mail of last week I forwarded to you copies of several inscriptions of some interest, and in the hurried note which accompanied them omitted two things.

1. I forgot to mention that perhaps Mr. Palmer and Mr. Drake have already taken a copy of the Cufic inscription from the outer wall of the mosk, and that I sent a copy to Mr. Drake two mails ago asking him about it.

2. It quite escaped my memory (it is only with great effort that I can give any time to these things at this sickly period of the year) that the bronze of the doors of the mosk (Dome of Rock) bear inscriptions with the date 216. This of course precludes the possibility of Jafr having been the first to make a roof over the outer corridor.

The top of the outer wall ought to be examined, but it is not easy to get at it. Possibly next week I may be able to see what can be made of it.

I cannot find that anything is written in the Arabic histories about Jafr having repaired the Dome of the Rock, but others, better acquainted with the subject, and with more time at their disposal than myself, may be more successful in their search.

My Arab friends read the inscription from the beam differently from what I did. According to them the line would run, "To God El Saidy, mother of El Muktader Billah."

THOMAS CHAPLIN.

#### NOTE ON THE ABOVE LETTER.

We are indebted to Prof. E. H. Palmer for an accurate translation of the Cufic inscriptions lately found on one of the beams in the roof of the outer corridor of the Dome of the Rock. The inscription was copied by Dr. Chaplin, and also by Mr. Schick, and runs as follows:—

"In the name of God. Grace from God to the servant of God, Jäfer



el Muktader Billah, Commander of the Faithful—may God spare him to us. According to the order of Essaiyideh (may God aid her), and it was performed by the hands of Lebid, a Freedman of Essaiyideh, and that was in one and . . . .”

Unfortunately the inscription becomes illegible at the date; but Prof. Palmer states that he has found in an Arabic historian an account of the restoration and repairing of all the Mosques and Masjids in the Empire, by Ali Ibn Isa, vizier to El Muktader, in the year of the Hejira 301 (A.D. 913), to which this inscription probably refers.

We hear from Dr. Chaplin also that the aqueduct from Solomon's Pools is now restored, that the fountains in the court-house, Makhama, the Kas in the Haram, the Birket el Naranj, and the Bab el Nazir, are all running over with fresh water.

The repairs in the Haram are proceeding steadily, the Sultan having sent £30,000 for expenses, under the direction of an Armenian builder from Constantinople. In the outer wall of the Dome of the Rock has been found a portion of a Latin inscription, on marble, but in a fragmentary state.

Lieut. Steever, of the American Expedition, has informed Dr. Chaplin that he could get no pottery in Moab like that in the Shapira collection.

---

### THE SAMARITAN STONE AT GAZA.\*

My curiosity was first stimulated in searching after inscriptions by observing the extraordinary amount of energy exhibited by M. Ganneau, who visited Gaza about three years ago. I accompanied this gentleman to several interesting parts of the town, and assisted him in procuring a few Greek inscriptions. We also visited the same spot where the stone was discovered, which is distant from the town about a mile, and half a mile from the sea-shore. It has now been in my possession about a year, and was found in one of the numerous sandpits where excavating is carried on by the natives to obtain stone for building purposes.

About a year ago, passing by the same spot, I questioned some of the labourers then at work about stones bearing inscriptions, &c., and was informed that a few days before three of this description had been found. After making further inquiries I succeeded in finding out to whom they had been sold, but having to act very cautiously, in order not to excite suspicion, I regret that I was obliged to delay the matter too long; and upon opening the question about the stones the owner coolly told me that he had *scraped* the two largest! and the other, I suppose, not being large enough for the purpose required, was thrown aside, to share the same fate at some future time. However, after some difficulty I succeeded in getting it; this is the whole history of the stone.

\* See *Quarterly Statement*, July, 1873, p. 118.



About two months ago three marble pillars were discovered in one of the sandpits before mentioned; they are all of the same size and architecture. A drawing of these might likewise be interesting. About a month ago I also found in the town a lamp similar to the one found in the Pool of Bethesda, with this exception: at the broadest end in bas relief is something not unlike a serpent's head.

Many curious seals are at times found here and about the district of Gaza. I might send you sealing-wax impressions of some of these if you think they would be of any interest. I shall always be very glad to keep you duly informed of everything that may be found at Gaza, and supply you with copies, &c.

J. G. PICKARD, *Gaza*.

## STATE OF THE RUINS OF BAÄLBK.\*

*Extract from a detailed report by Lieutenant Conder, R.E.*

It being necessary, during the extreme heat of summer, to suspend the outdoor work of the Survey for some weeks, and to move the camp to the cooler mountain region of the Lebanon, the Committee requested Lieutenant Conder to devote some portion of the time spent in that district to a careful examination of the ruins of the magnificent temples of Baälbek, which are reported by travellers to be in a most precarious condition, especially the group known as the "Six Great Columns." Letters on the subject have appeared during the last two years in the *Times* and other papers from Mrs. Burton, Mr. Julian Goldsmid, Mr. Crace, and others. This "vacation task" Lieutenant Conder has undertaken with energetic enthusiasm, and he has now sent home a report, dated August 22, giving most careful technical details of the defects, and consequent risks of each column of the "great" and "lesser" temples, with such dimensions and other information as will make it a valuable document to any who may desire to ascertain whether it be possible to delay the impending destruction of these splendid monuments. The subject not being directly connected with the work of this Fund, the Committee do not propose to print the whole report, which, however, will be made available to those specially interested. They think, however, that the following extracts will prove interesting to many subscribers. Lieutenant Conder says:—

"My attention was directed to three principal objects—1. The condition of the key-stone of the great lintel of the Temple of Jupiter. 2. The condition of the peristyle of the same. 3. The condition of the six remaining columns of the Great Temple.

"1. The eastern doorway of the (so-called) Temple of Jupiter is 21ft. wide, and 42ft. high in the clear. The jambs are huge pilasters, in three courses, containing interior staircases. The lintel consists of three

\* The report will be found at length, and fully illustrated, in the *Builder* of October 4.

stones, the central key-stone being slightly tapered, as in an arch, and apparently once held in place by metal clamps. The stone is a hard, compact, non-fossiliferous, white limestone. I have taken its specific gravity roughly at 2.5 in order to approximate the various weights, but send home a specimen to allow of their being more exactly determined. The key-stone measures 10ft. 10in. in height, 12ft. in thickness (front to back), and has an average breadth of 6ft. 5in. It must, therefore, contain approximately 858 cubic feet, which will give a weight of about 60 tons. . . . It has slipped down rather more than half its depth from its original position, and on the south side only about one quarter of its side bears against the other block, which is broken away below. A wall of roughly squared stones (of about a foot cube), in mortar, has been built under the key-stone by the Turks, and appears to be a suitable and sufficient support. The only objection to be made to it is that the soffit of the stone is thus covered, and the eagle invisible. Should it be proposed to raise the lintel to its former position, the superincumbent stones, each weighing about 20 or 30 tons, must first be removed. I did not observe any indication of present danger, except from the jar which the fall of the smaller stones of the cornice might give. The other blocks of the lintel appear to be safe. The fall of the key-stone is probably attributable to the removal of the metal clamps, and to subsequent shocks of earthquake.

"2. *The peristyle.* On the north side nine columns remain, with roofing; on the west, three, with only the entablature; on the south, four, and two of the fluted inner row which ran from the antæ and in front of the temple on the east. Judging from a fallen column the heights are as follows:—

			Ft.	In.			Ft.	In.
First stone	...	...	22	5				
Second "	...	...	14	11				
Third	...	...	11	3				
			<hr/>		Shaft	...	48	7
					Capital	...	5	11
					Base	...	3	4

57ft. 10in.

The diameter at the base is 5ft. 7in., and at the capital 5ft. The intercolumniation is 8ft. 10in., and the width of the peristyle, in the clear, the same."

Lieutenant Conder then gives the dimensions of the entablature, and calculates the weight of that and the roofing as equivalent to "a crushing weight, on each pillar, of 105½ tons, or 4 tons per square foot." "The centre of gravity of this weight is easily calculated, and will be found to pass through the centre of the pillars." He then goes on to describe, in detail, the condition of each pillar of the peristyle, by aid of a figured plan. Almost every one of them has been much injured both by man and earthquake, as well as by natural decay, and most of them have been excavated at the base, by the Arabs, for the sake of the metal pin, which has been abstracted from the centre.

The general conclusion is arrived at that the two external columns on the north side are in a dangerous condition,—“the next to them are cracked and overloaded, and the remainder, though at present safe, would suffer in the same manner, from unequal loading, on the fall of the outer. The condition of the entablature is also unsafe.” Lieut. Conder also calls attention to the risk to the columns at the south-east angle of the temple, caused by the Saracenic tower built over that portion, and which causes a serious overweighting of the lower structure. He suggests the removal of this later superstructure, but allows that it would be a work of difficulty.

Perhaps that part of the report which treats of the condition of “the six great columns” will be deemed most interesting, as their danger is also more imminent. Lieut. Conder describes the causes of danger with great care, and in detail he says:—

“The diameter of these columns is 7ft. 6in. at the base; the height (according to Murray, who gives the diameter and entablature correctly) is 75ft. including base and capital.” The entablature is (in design) exactly similar to that of the former temple, and its centre of gravity is at a distance of 3ft. 3in. from its north side, thus bringing its greatest weight on the south side of the columns. “The columns are exposed to the full force of the northern and westerly gales, and have suffered far more on these sides. They are shattered from top to bottom, and are flaking off rapidly. They appear to have been subjected to the effects of frost as well as of rain and wind.”

Lieut. Conder then enumerates the columns, commencing from the west end of the group:—

- No. 1.—Has two pieces excavated just above the base; one to a depth of 2ft. 3in. A piece flaked off 10ft. high and 1ft. deep, and a large piece containing about 70 cubic feet cracked off the base.
- No. 2.—Has an excavation 2ft. 6in. high, 2ft. deep, and about 3ft. wide; all three stones of the shaft are shattered, and flaking on the north side.
- No. 3.—About 56 cubic feet cracked off the base block. A piece about 2ft. thick cut out across the base of the shafts, and large fragments peeled and flaked off.
- No. 4.—This pillar is very infirm. Large flakes have fallen off, and the cracks show that more will follow. At the bottom only about half the diameter is left.
- No. 5.—Has a large piece chipped off the base, and very serious fractures in the highest and lowest blocks of the shaft.
- No. 6.—Is the most “shaky” of the group. Large pieces have been cut out above and below; and “underneath the base a stone has been abstracted measuring about 40 cubic feet.” This column is likely to fall in the first great storm, and to bring down No. 5 with it.

Lieut. Conder gives many additional details and measurements, accompanied by explanatory diagrams. But his report will be published with

his illustrations in *The Builder*, to which periodical we may refer such of our subscribers as may be more specially interested in the question of the possibility of preserving these grand remains to another generation. The subject is, strictly speaking, outside the objects of the Fund, but, opportunity offering, the Committee directed the attention of their surveying officer to the subject, and requested his report, feeling that the matter was urgent, and that, having so competent an officer on the spot, they might, at small sacrifice, render an important service to archæology and art.

---

#### NOTES FROM MR. CL. H. GREEN ON THE GEOLOGICAL SPECIMENS SENT HOME BY LIEUT. CONDER.

I HAVE at last found time to look over the geological specimens which Lieut. Conder has sent home from Palestine. The parcels are numbered up to 42, but there are none of the numbers 3, 9, 11, and 13.

Fourteen of the specimens contain fossils. Without help and books of reference, which I cannot get here, I cannot determine these; some are certainly of Cretaceous, and some probably of Jurassic or Oolitic age. When I am in London, towards the end of the year, I dare say I shall be able to give you a more detailed description, and the names of some of these fossils; others which are imperfect, or only in the state of casts, will scarcely be determinable specifically.

Ten of the parcels, Nos. 1, 6, 27, 28, 29, 30, 31, 33, 35, and 42, are specimens of volcanic lavas and ashes. With one exception, No. 42, which is a trachyte, and not taken from a rock or place, all the lavas are doleritic in mineral composition; their structure also seems to indicate that the outpourings were subærial, or, if they flowed under water, that it was of no great depth.

There are two specimens of sedimentary beds, from volcanic localities. No 2, a red calcareous sandstone from Shayk Iskander, and No. 32, consisting of thin laminæ of similar sandstone and green marl, with layers of fibrous carbonate of lime, from Ikzim. These have the look of deposits formed in a lake; there is nothing to show whether they are interstratified or not with the volcanic rocks. Possibly they indicate a similar state of condition to those under which the rocks of Auvergne were formed where there are alternations of lacustrine strata with volcanic ash and lava. In the same parcels are many fragments of white calcareous tufa, which look like portions of veins that have been deposited by percolating water in the cracks of the lava. All the volcanic rocks are saturated with carbonate of lime produced in this way. The date, or dates, for the volcanic eruptions of Palestine took place at different times, and must be determined by the geological structure of the country; it is probable that all are younger than the Lower Tertiary, or Nummulitic beds, and I should not be surprised if many turn out to be of Middle Tertiary, or Miocene age.

There are also a number of specimens of rocks, on the beach formed of shingle and other fragmentary materials cemented by carbonate of lime. These are associated with broken bits of pottery and glass, and are therefore of modern date, and perhaps still in the course of formation.

I have had another letter from Lieut. Conder, and have replied to it at length, pointing out to him what I think are the meanings of the observations he has so far made, and directing his attention to the points which it is of most importance to notice.

*Sept. 18, 1873.*

CL. H. GREEN.

## EXTRACT FROM A LETTER FROM THE AMERICAN ASSOCIATION.

LATE advices from Syria (in advance of official dispatches), by letter of Lieutenant Steever, commanding expedition, dated July 14th, furnish information of the highest interest. The expedition reached Moab on the first of April, and fixed their camp at Hesbân. Fifteen miles from here, a favourable location having been found, a base-line was satisfactorily measured and established. This done, nearly four hundred square miles have since been triangulated, and the detail of the same almost completed, including the hill shading. The heights of all points within the triangulation have been ascertained, and elevation above the levels of the Dead and Mediterranean Seas well obtained.

Meteorological observations have been regularly taken. It is found that the maps—Van de Velde's, even—of this country are utterly worthless and unreliable. This is not strange, since this region of country and portion of the Holy Land have been nearly inaccessible to travellers. Nor would it be safe now, probably, except by a well-organised expedition.

The archæological and scientific departments of the expedition have also been very successful.

Professor Paine has diligently and zealously pursued his researches and studies. He has already prepared a voluminous report, which has been forwarded through the official channel of the Society at Beirût, on the identification of Nebo and Pisgah. To say nothing of his other discoveries, this alone is a great achievement. Every day's work in the field has revealed to them ruins heretofore unknown and unmentioned by any traveller. The Bedawin tell of the ruins of cities a few days' journey to the south and east, which it is impossible now to visit. The whole country from Kerak to Hauran is in a very disturbed state, in consequence of hostilities between the different tribes. The expedition would soon go into summer quarters. Lieutenant Steever advises resumption of work in autumn rather than wait till the spring.

*July 20, 1873. Palestine Exploration Society,  
26, Exchange Place, New York.*



# LIST OF SUBSCRIPTIONS.

SEP. 23RD, TO DEC. 18TH, 1872.

*a* denotes Annual Subscriber.

\* \* If any omission or mistake be observed in the following lists, the Secretary will be glad to be informed of it, and will rectify the error in the next *Quarterly Statement*.

## SPECIAL JERUSALEM FUND.

W. Amhurst Tyssen Amhurst, Esq.....	£50	0	0
Ven. Archdeacon Bisset.....	1	0	0

## SURVEY AND GENERAL PURPOSES.

	£	s.	d.		£	s.	d.
W. Amhurst Tyssen Amhurst, Esq. ....	50	0	0	<i>a</i> H. Lumley, Esq. ....	1	1	0
G. M. E. ....	100	0	0	<i>a</i> G. Hankey, Esq.....	1	0	0
Rev. Prof. Pusey .....	15	0	0	John Watson, Esq.....	0	5	2
Mrs. Cunliffe .....	10	0	0	<i>a</i> Mrs. Fountain.....	2	0	0
<i>a</i> James Dinmock, Esq. ....	10	0	0	<i>a</i> Rev. G. M. Lee .....	1	1	0
<i>a</i> Rev. James Moorhouse .....	1	0	0	<i>a</i> H. Prigg, Esq., jun. ....	0	10	6
<i>a</i> C. Walton, Esq. ....	1	1	0	<i>a</i> J. Miland, Esq. ....	1	0	0
<i>a</i> Rev. A. Brook.....	0	10	0	<i>a</i> Thomas Fox, Esq. ....	1	1	0
<i>a</i> G. W. Dodds, Esq.....	1	1	0	<i>a</i> James Cunliffe, Esq. ....	1	1	0
<i>a</i> Dr. Gilchrist .....	1	0	0	<i>a</i> Bryce Allen, Esq. ....	1	1	0
<i>a</i> A. S. Robson, Esq.....	1	1	0	<i>a</i> R. Govett, Esq. ....	1	1	0
<i>a</i> Col. Gawler .....	0	10	6	J. Ackland, Esq.....	1	1	0
<i>a</i> Rev. Canon Cockin .....	0	10	6	<i>a</i> Lorraine Estridge, Esq. ....	1	1	0
<i>a</i> Rev. S. A. Orger.....	0	10	6	<i>a</i> Rev. C. L. Acland .....	1	1	0
<i>a</i> Maj.-Gen. Clarke.....	0	10	0	<i>a</i> J. H. Brockleyhurst, Esq.....	1	1	0
<i>a</i> Rev. Nicholas Hurry .....	0	10	6	<i>a</i> James Fildes, Esq.....	1	1	0
<i>a</i> R. T. Webb, Esq. ....	1	1	0	<i>a</i> Miss Copley.....	1	1	0
<i>a</i> Miss F. P. Martin .....	2	0	0	<i>a</i> Rev. E. Summers .....	0	10	6
<i>a</i> Mrs. Lacon .....	1	1	0	<i>a</i> Rev. G. S. Ingram .....	1	1	0
<i>a</i> R. Chalmers, Esq. ....	0	10	6	<i>a</i> T. Carrick, Esq. ....	1	1	0
J. D. Thomas, Esq. ....	0	9	0	<i>a</i> Thomas Grant, Esq. ....	1	1	0
<i>a</i> C. S. Inglis, Esq. ....	0	10	6	<i>a</i> A. Lupton, Esq. ....	1	1	0
W. Edmunds, Esq.....	1	1	0	<i>a</i> W. H. Avery, Esq.....	2	2	0
<i>a</i> Peter Owen, Esq. ....	1	1	0	<i>a</i> W. B. Young, Esq.....	1	0	0
<i>a</i> Rev. Jeffreys Worthington ...	0	10	6	Do. for 1873 .....	1	0	0
Peter Mill, Esq. ....	0	10	6	<i>a</i> Mrs. Chester .....	1	1	0
<i>a</i> Rev. R. Wedgewood .....	1	1	0	<i>a</i> G. Blaine, Esq. ....	1	1	0
<i>a</i> Rev. W. Niven (for 1873).....	0	10	0	Do. for 1873 .....	1	1	0
<i>a</i> Rev. H. Smith .....	1	1	0	<i>a</i> A. Sperling, Esq. ....	1	0	0
<i>a</i> Rev. W. Lethaby .....	0	10	6	<i>a</i> S. Harris, Esq. ....	0	10	6
				<i>a</i> Rev. H. S. Robjohns.....	0	10	0

LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
aC. J. Upton, Esq. ....	0	10	0	aW. Sissons, Esq. ....	1	1	0
aCharles Goodban, Esq. ....	0	10	0	aDr. W. M. Cooke .....	1	1	0
aJ. Cudworth, Esq. ....	1	1	0	aRev. J. Bleakley .....	1	1	0
aMiss Enderby .....	1	1	0	Rev. H. West .....	1	0	0
Miss Laura Relton, collected by	0	7	0	aMrs. Brodrick .....	1	1	0
aRev. C. F. Stringer Rowe .....	1	1	0	aJohn McAusland, Esq. ....	1	1	0
aF. F. Tuckett, Esq. ....	2	2	0	aMatthew Paul, Esq. ....	1	1	0
Peter Spence, Esq. (a£2 2s.)	4	4	0	aN. Barnaby, Esq. ....	1	1	0
aMessrs. Philip, Son & Nephew	1	1	0	aMrs. Lloyd .....	1	0	0
aA. M. Touch, Esq. ....	0	5	0	Rev. C. D. Beckford (2nd don.)	2	2	0
aRev. P. R. Robin .....	2	2	0	aRev. J. P. Lockwood .....	1	1	0
aRev. James Taylor .....	0	10	6	aMiss Cotton .....	1	1	0
Rev. H. E. Lowe .....	2	2	0	aArthur Jones, Esq. ....	5	0	0
Dean of Chichester (a£1) .....	2	0	0	aCol. Maitland .....	1	1	0
aJ. H. Simpson, Esq. ....	1	1	0	Samuel Hay, Esq. ....	2	2	0
aP. Simpson, Esq. ....	1	0	0	R. Brown, Esq. ....	1	1	0
Dr. Kitching .....	0	5	0	aG. E. Moser, Esq. ....	2	2	0
Miss Willshen .....	0	10	0	aVen. Archdeacon Freeman ..	1	1	1
aS. H. Officer, Esq. ....	5	5	0	aAdam Bailey, Esq. ....	1	1	0
aRev. L. R. Ayre .....	2	2	0	aLady Lush .....	1	0	0
aRev. A. E. Northey .....	2	2	0	aW. Appleford, Esq. ....	0	10	6
aRev. W. W. Willson .....	0	5	0	aMrs. Bidder .....	1	1	0
aC. M. G. ....	1	1	0	aG. Leybourne Carley, Esq. ...	1	1	0
aG. M. Munro, Esq. ....	0	10	4	aJ. Goddard, Esq. ....	1	1	0
W. H. Gamlen, Esq. ....	5	0	0	aJohn Robson, Esq. ....	1	1	0
aT. Jarrold, Esq. ....	1	1	0	aRev. J. W. W. Taylor .....	1	1	0
aE. Nuth, Esq. ....	1	1	0	aCol. Brooke .....	1	1	0
aThos. Wilson, Esq. ....	1	1	0	aRev. C. W. Woodhouse .....	0	10	6
aJoshua Brough, Esq. ....	1	1	0	aH. C. Stuart, Esq. ....	1	1	0
aR. J. Snape, Esq. ....	1	1	0	aRev. T. M. R. Barnard, for			
aJoseph Conyers, Esq. ....	1	1	0	1873 .....	0	10	0
aJohn Gould, Esq. ....	1	1	0	Rev. R. E. Edwards .....	0	10	6
aMajor Clark .....	1	1	0	G. W. Boase, Esq. ....	1	1	0
aW. R. Spicer, Esq. ....	5	0	0	aJames Dodgshun, Esq. ....	1	1	0
aF. Squire, Esq. ....	1	1	0	aDr. Culross .....	0	10	6
aRev. C. H. Hole .....	1	1	0	aMiss Hewett .....	0	10	6
aMrs. Branton .....	1	1	0	aRichard Stothert, Esq. ....	1	1	0
aRev. James Holme .....	1	1	0	aF. B. Baker, Esq. ....	1	1	0
aMiss H. Kelly .....	0	2	6	aMiss E. G. Petit .....	1	1	0
aEugene Stock, Esq. ....	0	10	6	Rev. J. G. Lonsdale .....	0	10	0
aT. W. Marsh, Esq. ....	0	10	6	aJohn Polson, Esq. ....	1	0	0
aJohn George, Esq. ....	0	10	6	Rev. D. Anderson .....	1	1	0
aF. Petrie, Esq. ....	1	1	0	aRobert Brown, Esq. ....	0	10	6
aRev. John Compton .....	1	1	0	aAdolf. J. Gnospelius, Esq. ...	1	1	0
Do. for 1873 .....	1	1	0	aRev. W. N. Ripley .....	2	2	0
aMrs. Tyndal .....	0	10	6	aSir Edward Strachey .....	1	1	0
aF. Baines, Esq. ....	1	1	0	aRev. H. Winwood .....	1	1	0
aRev. S. Rogers .....	0	10	0	aRev. W. F. Woofenden .....	0	10	6
aHarrison Milligan, Esq. ....	1	1	0	Col. Hennell .....	1	1	0
aRev. Dr. Porter .....	1	0	0	aRev. E. Moore .....	1	1	0
aH. J. Ker Porter, Esq. ....	1	1	0	aErnest Noel, Esq. ....	1	1	0
aMajor Speid .....	1	1	0	aRev. H. J. Ellacombe .....	1	1	0
aC. E. Brightwen, Esq. ....	0	10	6	aMrs. Mountain .....	1	1	0
aJ. Whitfield, Esq. ....	0	10	6	aRev. G. O. Wray .....	1	1	0
aJames Cropper, Esq. ....	1	1	0	aMrs. Seton Karr, for 1873 .....	1	0	0
aHenry Brown, Esq., jun. ....	0	10	6	aRev. W. R. Bayley .....	2	0	0
aD. Matheson, Esq. ....	1	1	0	aH. S. Redpath, Esq. ....	1	1	0
aWalter Sturge, Esq. ....	5	0	0	aJ. Orme Cooper, Esq. ....	0	10	6
aMrs. Wrightson .....	1	1	0	aRev. D. G. Thomas .....	0	10	6

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
Paid into Coutts's Bank—				knownledged in the April Quar-			
H. S. B., per the Archbishop				terly—			
of York.....	5	0	0	Aytoun, Miss, Sunnyside, Ay...	0	10	0
aT. B. L. Stewart, Esq. ....	1	1	0	Cowan, Hugh, Esq., St. Leonards,			
aRev. E. M. Stewart.....	1	1	0	Ayr .....	0	10	0
aJ. R. Stewart, Esq.....	1	1	0	Currie, D., Esq., Burns Street,			
aRev. H. Stewart .....	1	1	0	Ayr .....	0	5	0
aJ. R. Stewart, Esq., jun.....	1	1	0	Cuthbert, Miss Jane (Edinburgh)	0	5	0
aCapt. H. Moody .....	1	1	0	Douglas, Campbell, Esq., 266,			
Paid into Union Bank—				St. Vincent Street, Glasgow...	0	10	6
aRev. F. D. Pritt .....	1	1	0	Dykes, Rev. Dr., The Manse,			
John Noble, Esq. ....	5	0	0	Ayr .....	0	10	6
aW. A. Plumptre, Esq. ....	0	10	6	Dunlop, Miss .....	0	10	0
aMiss Locock .....	2	2	0	Flint, John, Esq., Ay.....	0	10	6
aF. Norman, Esq.....	0	10	0	Lennox, General, Ay.....	0	10	6
aW. Ferguson, Esq.....	1	0	0	McMurtrie, James, Esq., Bank			
aLord Talbot de Malahide .....	1	0	0	of Scotland, Ay.....	0	5	0
aHon and Rev. A. Legge. ....	1	1	0	McNeille, Mrs., Blackburn Villa,			
aH. S. Edgeworth, Esq....	1	1	0	Ayr .....	0	5	0
aMajor Elmsall .....	1	1	0	McFaggart, Miss, Seafield House,			
aA. M. Coleman, Esq. ....	0	10	6	Ayr .....	1	0	0
aRev. S. F. Smith .....	2	2	0	Murdoch, J. F. Esq., Fairfield			
				Lodge, Ay.....	0	10	6
				Murdoch, R. D., Esq. ditto ditto	1	1	0

## LOCAL ASSOCIATIONS.

### ABERDEEN.

Nov. 26.—Archdeacon Bisset—			
Jerusalem .....	1	0	0
Survey.....	2	0	0

### ALLOA.

Nov. 12.—By cash .....	5	0	0
Alexander Bryson ... £0	10	6	
W. Bennet Clark.....	0	10	6
Wm. D. Bonn .....	0	10	6
H. Moir.....	0	10	6
John Duncan .....	0	10	6
A. Forrester Paton ...	0	10	6
Wm. Bailey .....	0	10	6
David Paton.....	0	10	6
P. McDowall .....	0	10	6
C. Paton Cowden.....	0	10	6
	5	5	0
Expenses .....	0	5	0

### AYR.

The following is the list of subscribers. The amount was ac-

### BEDFORD.

Sept. 26.—By cash .....	10	9	0
Nov. 8.—			
aJ. H. Tuke, Esq. ....	1	1	0
aMiss E. Tuke .....	1	1	0
aF. Seebohm, Esq.....	1	1	0

### BIRKENHEAD.

The following names have been sent in by the Hon. Sec. :—			
aRev. W. R. Blackett .....	0	10	6
Rev. R. Richardson.....	5	0	0
Mr. Newton .....	1	0	0
aMiss Harison .....	1	0	0
aHenry Scott, Esq. ....	0	10	6

### BIRMINGHAM.

The Committee will be very glad to hear of any gentleman willing to help them in the formation of an association for this town and its suburbs.			
By cash—aW. Jeff, Esq. ....	1	1	0

### BOLTON.

Nov. 19.—aR. Stockdale, Esq....	0	10	6
aW. Makant, Esq.....	0	10	6

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
aT. Holindrake, Esq. ....	0	10	6	BOTHWELL.			
aJ. Joseph Heaton, Esq. ....	0	10	6				
aP. C. Marsden, Esq. ....	1	1	0	Mrs. Christie .....	0	10	0

## BATH.

The following balance sheet to be taken in place of that published in the July *Quarterly*, which contained an error:—

Advertisements .....	0	5	6	Balance of 1871.....	2	5	0½
By cheque, May 6.....	6	19	5½	Miss Dyke .....	0	5	0
By ditto, July 3 .....	2	2	0	The Misses Goldies .....	1	0	0
By balance, Nov. 15.....	4	10	1	Rev. J. Bond .....	0	10	0
				R. T. Gore, Esq. ....	0	10	0
				Rev. W. H. Sargent .....	1	1	0
				Rev. J. F. Moon .....	0	10	0
				Mrs. Moon .....	0	10	0
				Mrs. Mount .....	1	1	0
				Rev. R. Drummond .....	0	10	0
				Captain Anderdon .....	2	2	0
				Rev. T. P. Methuen .....	1	1	0
				W. Daubeny, Esq.....	0	10	0
				Rev. C. Kemble .....	0	10	6
				E. T. Caulfield, Esq.....	0	10	6
				Mrs. Churton .....	1	1	0
	13	17	0½				
					13	17	0½

## BRIGHTON.

Nov. 6.—aMiss Bovill .....

And the following names have been received:—

C. Bellingham, Esq. ....	£0	10	0
Miss H. Hooper .....	0	10	6
Rev. E. B. Elliott .....	1	1	0
Mrs. Soames .....	1	0	0

Erratum from list of names of January, 1872—

For Mrs. Grames read Mrs. Soames.

## BROMLEY.

Collected by Miss Howorth .....	2	3	6
Miss Barnes .....	0	10	6
Miss Howorth .....	0	10	0
J. Howorth, Esq. ....	0	10	0
Dr. Briggs .....	0	10	6
Rev. T. Stroyan.....	0	2	6

## BURY ST. EDMUNDS.

The Honorary Secretary, Mr. H. Prigg, jun., has resigned.

## CANADA.

aJ. J. Gibb, Esq., Montreal.....	2	2	0
----------------------------------	---	---	---

aMrs. J. J. Gibb, Montreal .....	2	2	0
aCharles Gibb, Esq. ....	2	2	0

The following names have been received from the Hon. G. W. Allan:—

Allan M <sup>c</sup> Lean Howard, Esq., Toronto .....	dols.	5
W. Edwards, Esq., Woodstock, Ontario .....		3
C. S. Beard, Esq., Woodstock, Ontario .....		3

## CARDIFF.

The Hon. Sec. for Cardiff, Mr. J. C. Oliver, having resigned, the Committee would be very glad to hear from any gentleman able to help them in this town.

## CHIPPENHAM.

Nov. 25.—By Cash .....	8	15	0
Sir John Neeld, Bart. (donation) .....	£5	0	0
Sir J. W. Awdrey (donation) .....	1	0	0
H. G. Awdrey, Esq. ....	0	10	0
Rev. F. R. Sidebottom .....	0	10	0

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
Rev. H. K. Bolden	£0	5	0	18. Miss Muir, 10, Marchiston-			
Rev. O. K. Prescott	0	5	0	avenue.	1	0	0
Rev. T. A. Strong	0	5	0	18. James Veitch, 8, N. Marchis-			
Jacob Phillips, Esq.	0	5	0	ton-place.	1	1	0
Joseph Lane, Esq.	0	5	0	18. John Boyd, 27, Melville-st.	1	0	0
A. Ludlow, Esq.	0	5	0	18. Executors Robert Cox, 25,			
A. T. Keary, Esq.	0	5	0	Rutland-street.	2	0	0
				18. John Kennedy, 71, Great			
CLIFTON.				King-street.	1	1	0
Oct. 22.—aRev. M. Brock	0	10	0	18. Wm. Younger & Co., Abbey			
				Brewery.	1	1	0
DORCHESTER.				18. J. W. Begbie, M.D., 16, Gt.			
Oct. 26.—By cash	4	2	0	Stuart-street.	1	1	0
E. Pearce, Esq. (don.)	0	10	0	18. John Macnair, 31, Moray-pl.	0	10	6
Rev. H. Moule and				April.			
family (don.)	1	10	0	24. Wm. Lyon, 51, George-st.	1	0	0
Rev. H. C. G. Moule				25. F. Brown Douglas, 21,			
(ann.)	2	2	0	Moray-place.	0	10	6
				25. John MacLaren, 138, Princes-			
EDINBURGH.				street.	0	5	0
The following list has been				25. Miss Fergusson, 18, Rut-			
received from Edinburgh of				land-square.	0	10	0
1872 subscribers :—				April.			
1872. January.				1. Rev. R. H. Stevenson, D.D.,			
5. W. Lechie, 11, Carlton-ter.	1	1	0	8, Oxford-terrace.	0	10	6
5. Mrs. Mill, 35, Howe-street	1	0	0	2. Rev. D. T. K. Drummond,			
18. John Hoyes, 7, Ainslie-pl.	2	0	0	6, Montpelier.	0	10	0
February :—				2. A. Morison, of Bognie, 12,			
1. Col. C. P. Barclay, 14,				Randolph-crescent.	1	0	0
Coates-crescent (dead)	2	0	0	2. J. Scott-Moncrieff, 19, Lyne-			
1. Mrs. J. Galloway, 58, Gt.				doch-place.	0	5	0
King-st.	2	1	0	2. R. Haldane, 17, Charlotte-			
1. Prof. Sir R. Christison, Bt.,				square.	0	10	0
40, Moray-pl.	1	1	0	2. Rev. G. D. Cullen, 33, Royal-			
1. Mrs. Archibald Stewart, 4,				terrace.	1	0	0
Merchiston-terrace.	0	10	6	2. Miss Aire, 6, Springfield ..	0	2	6
1. Miss Clayton, 28, Rutland-				February.			
square.	0	10	6	22. Rev. J. F. Montgomery, 17,			
1. Sir G. Harvey, P.R.S.A., 21,				Athole-crescent	0	5	0
Regent-terrace.	1	0	0	22. Mrs. M'Dowall, 13, Black-			
1. D. Coates, 9, Coates-cresct.	1	1	0	ford-road	0	5	0
1. W. Tait, 139, Princes-street.	0	10	6	22. Mrs. Seton, St. Bennet's ...	0	10	0
1. Isaac Anderson Henry, Hay				22. Misses Kennedy, 1, Church-			
Lodge, Trinity	0	10	6	hill	0	2	6
W. F. Burnley, 24, Ainslie-				22. Mrs. M'Lean, 8, Chamber-			
place.	1	1	0	lain-road	0	3	0
March.				22. Mrs. R. M. Smith, 4, Belle-			
11. John Watson, 16, Greenhill-				vue-crescent	1	0	0
gardens.	1	1	0	22. Miss Falconar & Mr. Craigie,			
18. Miss Crooks, 37, Manor-pl.	1	0	0	Falconhall	1	0	0
18. Mrs. E. Baxter, 9, Rutland-				26. Mr. J. Ford, 17, Grosvenor-			
square.	0	10	6	crescent	1	0	0
18. Mrs. D. MacFarlan, 6, Ran-				26. Professor Kelland, 20, Cla-			
dolph-crescent.	2	0	0	rendon-crescent	0	5	0
18. Rev. W. Thomson, 20, Lan-				26. D. Barton, 14, Clarendon-			
der-road.	0	10	6	crescent	1	0	0
				26. Mrs. Wood, 11, Clarendon-			
				crescent	0	2	6



## LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
26. Mr. T. C. Burrow, 15, Clarendon-crescent .....	0	10	0	10. Mrs. & Miss Paterson, 3, Coates-crescent .....	0	10	0
26. Mrs. A. Stewart, Marchmont-terrace .....	0	5	0	10. Prof. Balfour, 27, Inverlaith-row .....	0	10	0
26. J. H. Wilson, 1, E. Castle-road .....	0	5	0	18. J. T. Wilson, Restalrig .....	0	10	0
26. Rev. C. B. Coney, Portobello .....	0	10	0	20. Wm. Robson, 3, Palmerston-road .....	0	5	0
26. Miss Erskine, Portobello .....	1	0	0	20. J. Mitchell Harvey, 16, Chalmers-crescent .....	0	5	0
29. George Cowan, Valleyfield, Penicuik .....	2	0	0	20. Rev. Dr. Blaikie, 9, Palmerston-road .....	0	5	0
29. Miss J. C. Cowan, Valleyfield, Penicuik .....	2	0	0	20. A Friend at Grange .....	0	2	6
30. Thomas B. Johnston, F.R.G.S., 4, Andrew-sq. ... May.	1	1	0	20. A Friend at Trinity .....	0	2	0
6. Douglas MacLagan, M.D., 28, Heriot-row .....	1	1	0	20. Alex. Paton, 2, Drummond-place .....	0	5	0
6. John Moir, M.D., 52, Castle-street .....	1	0	0	27. James Gall, Myrtle Bank, York-road .....	0	2	6
6. James Falshaw, 26, Castle-street .....	1	0	0	21. J. Scott-Moncrieff, 19, Lyne-doch-place .....	0	10	6
6. John Millar, 2, S. St. Andrew-street .....	1	1	0	28. J. Murray, 8, Thistle-court .....	0	5	0
6. Andrew Usher & Co., W. Nicholson-street .....	0	10	0	31. John Chalmers, Castle Bank .....	0	5	0
6. Mrs. Marshall, 15, Findhorn-place .....	0	5	0	31. W. J. Duncan, National Bank of Scotland .....	1	1	0
6. James Sime, Craigmount .....	1	0	0	31. John M. Balfour, Pilrig House .....	0	10	6
6. Patrick Guthrie .....	0	5	0	31. Mrs. Pentland, Muirville .....	0	2	6
6. Miss Monat, The Grange House .....	0	10	0	31. Rev. James Fairbairn, Laverockbank-terrace .....	0	2	6
6. Dr. Anderson, R.N., 10, Mansion House-road .....	0	5	0	31. Mrs. Wilson, Laurel Bank .....	0	2	6
6. Rev. N. Wight, 11, North Lander-road .....	0	2	6	31. Mr. D. N. Scott, Trinity .....	0	2	6
6. T. Smith, Heriot-hill House .....	0	5	0	31. Miss Wright .....	0	2	0
6. Mrs. Steele, 18, Pilrig-st. .....	0	5	0	31. Miss Russel, Forthside .....	0	2	6
6. R. E. Scott, 25, Melville-st. .....	0	5	0	31. Wm. Fraser, 15, Saxe-Coburg-place .....	0	5	0
6. James Wright, 19, Buckingham-terrace .....	1	0	0	31. J. T. Black, 8, Bellevue-crescent .....	0	5	0
6. J. A. Jamieson, 14, Buckingham-terrace .....	0	10	0	June.			
9. T. G. Murray, 11, Randolph-crescent .....	5	0	0	7. James King, Duddington Mills .....	0	2	6
9. Mrs. Macfie, 14, Hope-terr. .....	0	5	0	7. D. Anderson .....	0	5	0
10. Prof. A. R. Simpson, 52, Queen-street .....	0	10	0	8. John Howison, Duddington .....	0	2	6
10. Rev. Dr. Peddie, 57, George-square .....	0	5	0	11. Sir F. Outram, Craigcrook .....	1	0	0
10. Miss Milliken, 1, Newington-place .....	0	2	6	12. Angus Macdonald, M.D., 41, Northumberland-street .....	0	5	0
10. Mrs. Meek, 19, Rutland-sq. .....	0	5	0	12. James Carnegie, 16, Windsor-street .....	0	5	0
10. Rev. D. F. Sandford, 19, Rutland-street .....	0	5	0	12. Rev. J. Calder Macphail, Pilrig Manse .....	0	5	0
10. Dean Ramsay, 23, Ainslie-place .....	0	5	0	12. W. J. N. Leith .....	0	2	6
10. Mrs. Scott, 5, Annandale-street .....	0	2	6	13. Mrs. Muston, 6, Cumin-pl. .....	0	2	6
				13. Rev. Dr. Duff, 22, Lander-road .....	1	0	0
				13. Rev. R. B. Blyth, 3, S. Mansion House-road .....	0	2	6
				13. D. Leighton, Mount Lodge, Portobello .....	0	2	6
				18. Mrs. P. D. Deans, Mount Charles .....	0	2	6
				13. Mr. Mercer, Ramsay Lodge .....	0	2	6

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
13. George Easton, Wellington-street .....	0	1	6	List of Subscribers:—			
14. Miss Mackenzie Stewart ...	0	2	6	Edward Banks, Esq., Falmouth .....	£0	10	6
14. Rev. R. H. Ireland, Abercorn-terrace .....	0	2	6	Rev. J. H. P. Bennett, Falmouth ...	0	5	0
20. Dr. Cumming .....	0	2	6	Mrs. R. S. Bolitho, Ponsandam, Penzance .....	1	1	0
20. James Campbell, 11, Fetter-row .....	0	5	0	Edmund Carlyon, Esq., St. Austell .....	2	2	0
20. T. S., 10, N. Mansion House-road .....	0	2	6	E. T. Carlyon, Esq., Truro .....	0	10	6
20. Mrs. Thomson, Lomond House .....	0	2	6	G. Lemon Church, Esq., Chasewater, near Truro .....	0	10	6
20. Mr. Thomson, Forthland House .....	0	2	0	Thomas Coo de, Esq., St. Austell .....	0	10	6
20. Dr. E. Peddie, North Trinity House .....	0	5	0	Rev. George Edgcome, St. Peter's Rectory, Nottingham .....	0	10	0
20. Rev. Dr. Aitken, 4, Charlotte-square .....	1	1	0	The late John S. Enys, Esq., Enys, near Penryn .....	1	1	0
September.				Miss Enys, Enys, near Penryn .....	0	10	0
6. James R. Stewart, Exchange Chambers .....	1	1	0	W. Fookes, Esq., Philleigh, near Grampound .....	0	10	6
November				R. W. Fox, Falmouth .....	1	1	0
5. Mrs. Colonel Macdougall, 17, Buckingham-terrace .....	0	10	6	Charles Fox, Falmouth .....	1	1	0
5. Miss Macdougall, 17, Buckingham-terrace .....	0	10	6	Robert Fox, Falmouth .....	1	1	0
5. Miss Merritt, 17, Buckingham terrace .....	0	10	6	R. Reynolds Fox, Westbrook, Tamerton, near Plymouth .....	1	1	0
5. Mrs. John Stewart, 7, Grosvenor-crescent .....	1	0	0	Francis E. Fox, Mannamead, Plymouth .....	1	1	0
5. Gilbert Bain, 3, Mayfield-terrace .....	0	10	6	A. L. Fox, Falmouth .....	1	1	0
5. Mrs. Chisholm, March Hall	0	10	0	John Freeman, Esq., Falmouth .....	1	1	0
5. Rev. Dr. Macgregor, 17, George-square .....	0	10	0	John D. Freeman, Esq., Falmouth ...	2	0	0
7. Rev. Alexander Whyte, 1, Coates-place .....	1	0	0	George Hext, Esq., St. Keep, Lostwithiel .....	0	10	0
7. Rev. A. Haldane Chinnery, All Saints Church .....	0	10	6	George Hill, Esq. St. Winnow, Lostwithiel .....	0	2	6
7. Malcolm Macgregor, 20, Queen-street .....	0	10	6	Mrs. Hodge, Menhaye Budock .....	0	10	0
7. Rev. Thomas Main, 7, Bellevue-crescent .....	0	10	0	Rev. William Rogers, Mawnan .....	1	0	0
9. A. F. Somerville, Lasswade	1	1	0	Miss L. Stackhouse, Truro .....	0	5	0
9. Miss Somerville, Lasswade	1	1	0				
9. John Cowan, Besslack, Milton Bridge .....	1	0	0				
Total	£87	12	0				
Secretary—T. B. Johnston. 4, St. Andrew-square; Edinburgh. 4th November, 1872.							
FALMOUTH.							
Nov. 12.—By cash, per A. Lutchman, Esq. ....	21	14	0				

# LIST OF SUBSCRIPTIONS.

£ s. d.

Colonel A. Tremayne, Carelew .....	£1	1	0
Francis Truscott, B.A., Falmouth...	0	5	0
Robert Tweedy, Esq., Truro .....	1	1	0
W. Duncalf, Esq.,...	0	5	0

## FOLKESTONE.

There is at present no honorary secretary for this town; the Committee would be glad to hear from any gentleman able to help them in this capacity.

## HALSTEAD.

Dec. 17.—By Cash, per Rev. S.

T. Hales .....	0	10	0
Rev. S. Blackall.....	0	10	0
Miss Creighton .....	0	10	0
D. Sinclair, Esq. ....	0	10	6
Rev. S. J. Eales.....	0	10	6
Stamps .....	0	0	6
Mrs. Watkinson.....	1	1	0
	3	1	6

## HELENSBURGH.

Oct. 26.—Miss Cunningham ...

0 5 0

## HERTFORD.

The following names have been received:—

Robert Smith, Esq. ....	5	0	0
Rev. Lewis Deeds .....	0	10	6
Mrs. Spencer Thornton.....	0	10	0

## HITCHIN.

The following Local Committee has been formed here:—

J. H. Tuke, Esq.  
Rev. J. B. Driver.  
Mr. Pollard.  
David Lloyd, Esq., *Hon. Sec.*

## HUDDERSFIELD.

Nov. 28.—By Cash .....

7 16 0

Return up to Nov. 27, 1872—

Mrs. Hughes, New-house, Huddersfield 0 5 0

£ s. d.

E. Brooke, Esq., Edg- erton .....	£1	1	0
Col. Brooke, Armi- tage Bridge, Hud- dersfield .....	1	1	0
J. A. Brooke, Esq., Northgate House, Huddersfield .....	1	1	0
J. W. Carlill, Thick- hollins, Hudders- field (second don.)	5	0	0

8 8 0

Oct., 1871.—Printers  
account for circu-  
lars .....

0 12 0

7 16 0

HENRY BARKER, *Hon. Sec.*

## HULL.

### *Report of Meeting held on Dec. 10th.*

"Yesterday afternoon the annual meeting of the Hull branch of the Palestine Exploration Fund was held at the Church Institute. The Rev. Canon Brooke was called to the chair. The Secretary (Rev. E. Jackson) read the annual report of the Committee. They reported that, in accordance with the resolution passed at the last general meeting in August, 1871, circulars were issued to residents in the town and neighbourhood inviting support to the fund. The Committee regretted the appeal met with but little success, but trusted that, as the object of the fund became better known, it would meet with the support which it deserved. During the past year the Hull branch had lost the services of its chairman through the removal to London of Colonel Francis, and of its treasurer by the death of Mr. Breeds. Successors would have to be appointed. The Committee called attention to the publication "Our work in Palestine," which was an account of the explorers' services since 1865. They reminded the supporters of the fund that hitherto the work carried on by the explorers had been chiefly underground at Jerusalem. The great object now was to obtain a correct map of Palestine on the western side of the Jordan, the explorations on the eastern side of that river being left to the American Association. In conclusion the Committee asked for an increased number of subscribers, in order that the work of the future might be carried on.—Mr. Sissons moved the adoption of the report just

# LIST OF SUBSCRIPTIONS.

read. He observed that he had read the quarterly reports of the society with great interest. He advised every one who wished to know anything about Palestine and facts bearing on Scripture to be subscribers to the Fund, and receive the quarterly reports.—Dr. Lunn seconded the motion, which was carried unanimously.—On the motion of the Rev. Canon Brooke, seconded by Mr. Sissons, Mr. J. E. Wade was appointed chairman for the ensuing year.—Mr. Wade then passed to the chairmanship of the meeting.—Mr. Sissons was elected treasurer, on the motion of the Chairman, seconded by Dr. Lunn.—The Rev. Canon Tristram, LL.D., then addressed the meeting. He observed that the Society was now doing a work very different from that in the past. For several years the Society had devoted itself to explorations almost exclusively in Jerusalem, and last year it commenced what it was hoped would be much more interesting to the Christian public at large—a general survey of the whole country. The work of the future was practical and simple, and people in England could easily see in its progress what was being done. The work could only be done thoroughly by a party of surveyors, and not only money but time was a great consideration. The surveying was a necessary work which would reward richly. He trusted they would be able in about four years to produce a map of a complete ordnance survey. Upon the whole work of exploring Palestine the sum of about £5,000 was required annually for about four years. There was a deal of caution required in working, as it was hardly safe to be among the natives out of sight of the Turkish authorities. The character of the country also delayed the explorations. Besides the surveying of the country in parts where work had been going on, the north and east had to be visited, but there the ruins, &c., were near the surface, not having been built upon. There was further work at Jerusalem in defining the sites of the outer walls. The discoveries of the explorers tended to elucidate Bible history, and all present knew how much better it was to examine a picture with a good light upon it.—Votes of thanks to Dr. Tristram and the Chairman closed the proceedings. A number of new subscribers was announced.”

## INVERNESS.

In reference to the balance-sheet of the Inverness Local Society, published in the *Quarterly Statement* for April, 1872, we are desired to explain that the large amount paid for advertising and “clerking” is due to the fact that the *whole of the North of Scotland*, and not the city of Inverness only, was advertised and canvassed. It is greatly to be regretted that the response was so small as to make the burden of this necessary expenditure fall upon the Inverness subscribers.

aRev. George Robson .....	0	10	6
---------------------------	---	----	---

## KETTERING.

Oct. 1.—			
aRev. H. Stobart .....	1	1	0
aMiss Sutton .....	1	1	0

## LEEDS.

Nov. 13.—aJoseph Conyers, Esq.	1	1	0
Nov. 15.—aF. Baines, Esq. ...	1	1	0

## LEWES.

Nov. 5.—			
Collected by Miss Relton—			
Mrs. R. Crosskey .....	0	2	0
Mrs. Cooper .....	0	2	6
Rev. E. Bray .....	0	2	6
	0	7	0

## LIVERPOOL.

The Rev. W. R. Blackett, 65, Bedford Street, has very kindly undertaken to act as Honorary Secretary for this important town. Subscribers in Liverpool and others interested in the Fund will be good enough to communicate with him.

Adolf. J. Gnosselius, Esq. ...	1	1	0
--------------------------------	---	---	---

## MARKET HARBOROUGH.

A Local Committee has been formed here, consisting of the following gentlemen—  
Rev. J. E. Stocks.

£ s. d.

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
Rev. — Morris.				NORTHAMPTON.			
Rev. J. S. Wille.				Committee formed—			
Joseph Nunnelly, Esq.				P. Perry, Esq.			
				Rev. Sydney Gedge.			
NEWARK.				E. F. Law, Esq.			
List forwarded by the Ladies' Committee.				Rev. Thomas Arnold.			
Collected by Mrs. Prince—				Mr. Scriven.			
Mr. Branston .....	1	1	0	Mr. Norman.			
Mrs. Hall .....	1	1	0	Joseph Williams, Esq.			
Mr. Nicholson .....	0	5	0	H. Marshall, Esq.			
Mr. Howitt .....	0	5	0	New Subscriptions promised at the Lecture—			
By Miss Readhouse—				P. Perry, Esq.			
Twig Society .....	0	10	6	Mr. Norman.			
Newark Advertiser .....	0	8	6	S. Sharp, Esq.			
Mrs. Walton .....	0	2	6	Mr. Taylor.			
Mr. E. Bousfield .....	0	12	0	Subscriptions paid or promised to E. F. Law, Esq., at the Lecture—			
Mr. Woodcock .....	0	6	0	Rev. T. Arnold .....	£0	10	6
Mr. Henry Walton .....	0	12	0	Rev. H. S. Gedge ...	0	10	6
Mrs. Taylor .....	0	10	0	E. F. Law, Esq. ....	0	10	6
Mrs. Deeping .....	0	5	0	Rev. R. B. Woodward	0	2	6
Mr. Marsh .....	0	10	6	Rev. L. Gedge .....	0	5	0
Mr. King .....	0	10	6	Mr. W. T. Law .....	0	10	6
A Friend .....	0	10	6	H. Marshall, Esq. ...	1	1	0
Miss Readhouse .....	1	1	0				
Mr. Bilson, jun. ....	1	0	0	PAISLEY.			
Master Newbold .....	0	10	0	Sept. 25.—a W. McIntyre, Esq.,	0	10	6
Miss Good .....	0	6	0				
Mr. John Wilson .....	1	0	0				
Mr. R. Warwick .....	0	10	0				
Rev. J. Millar .....	0	5	0				
By Mrs. Hodgkinson—							
Mr. Lammin .....	1	1	0	PERTH.			
Mr. G. Gilstrap .....	1	1	0	Oct. 1.—By cash .....	1	0	0
Viscountess Ossington .....	1	1	0	Wm. Belford, Esq. ...	0	10	0
Mr. Hodgkinson .....	1	1	0	Rev. Mr. Scotland,			
Mr. Deeping .....	0	6	0	Errol .....	0	5	0
	16	6	0	T. R. Kinmont, Esq.,			
Collected by Mrs. Tallents—				Errol .....	0	5	0
Mrs. Kendall .....	1	1	0				
Mr. Godfrey .....	1	1	0	PETERBOROUGH.			
Mr. Tallents .....	1	1	0	Dec. 2.—By cash .....	1	10	0
Mr. John Thorpe .....	1	1	0	Subscriptions for 1871-72, 5s. per annum—			
Mrs. Clark .....	0	10	0	Rev. Canon Argles,			
Mrs. Henry Branston .....	0	10	0	Barnack Rectory,			
Mrs. Wilson .....	0	10	0	Stamford .....	0	10	0
Mrs. Bakewell .....	0	10	0	H. H. English, Esq.,			
The Miss Lawtons .....	0	5	0	Westwood House,			
Mrs. Gilstrap .....	1	0	0	Peterborough .....	0	10	0
Miss Fillingham .....	0	5	0	Rev. C. J. R. Cooke.	0	10	0
	7	14	0				
NEWCASTLE-ON-TYNE.							
Nov. 6.—a R. Walters, Esq. ....	2	0	0				



# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
RICHMOND.				Miss Hunt .....	£1	1	0
Nov. 9.—By cash .....	3	16	0	Miss Mitchell .....	1	1	0
Including, less expenses, the				Rev. G. E. Phillips...	1	1	0
following :—				TUNBRIDGE WELLS.			
C. Govett, Esq. ...	£1	1	0	Oct. 28.—aRev. H. Bigsby... ..		0	10 0
J. C. Sharpe, Esq. ...	1	1	0	WINCHESTER.			
Mrs. Cook .....	1	1	0	Nov. 19.—By cash .....		2	10 6
Douglas Dent, Esq. ...	1	0	0	WINDSOR.			
READING.				Nov. 15.—By cash .....		2	2 0
Nov. 9.—By cash .....	2	4	6	aLady Georgina Need-			
aMartin Hope Sutton,				ham .....	1	1	0
Esq. (don. £1 1s.)..	2	2	0	John Holland, Esq... ..	1	1	0
Anon. ....	0	2	6	Dec. 27.—aC. W.			
SCARBOROUGH.				Jones, Esq.....	1	1	0
aT. F. Spurr, Esq.....	0	10	6	YARMOUTH.			
SHAFTESBURY.				Nov. 27.—By cash .....		4	18 0
Nov. 8.—aMiss E. Paterson.....	0	10	0	Subscriptions and Donations—			
aDr. Wills .....	0	10	0	Rev. H. R. Nerill ...	1	1	0
SOUTHPORT.				Mr. Spilman (2 yrs.)	2	2	0
Oct. 11.—aA. Jones, Esq. ....	1	1	0	Rev. T. O. Tudor and			
TORQUAY.				Mrs. Tudor .....	0	5	0
Oct. 6.—By cash .....	6	6	0	Miss Turner.....	0	5	0
Andus Clark, Esq. ...	1	1	0	S. D. M. ....	0	5	0
A. F. Haliburton, Esq. ...	1	1	0	Mrs. Aldrich .....	0	5	0
Rev. Dr. Harris .....	1	1	0	Miss Sherrington.....	0	5	0
				Miss Haddon .....	0	5	0
				Miss Harley .....	0	2	6
				Miss L. Cory .....	0	2	6

# LIST OF LECTURES.

REV. HENRY GEARY.

Place.					Date.					Collection
										£ s. d.
Eastbourne ...	...	...	...	...	Oct. 7	...	...	...	...	10 13 5
Lewes ...	...	...	...	...	" 8	...	...	...	...	7 9 0
Brighton ...	...	...	...	...	" 9	...	...	...	...	19 11 7
Harrow School ...	...	...	...	...	" 11	...	...	...	...	46 0 0
Camberwell Hall ...	...	...	...	...	Nov. 1	...	...	...	...	6 6 9
Holy Trinity, Kilburn ...	...	...	...	...	" 11	...	...	...	...	15 10 0
St. George's, Tufnell Park ...	...	...	...	...	" 18	...	...	...	...	1 10 2
St. James's, Clapham Park ...	...	...	...	...	" 19	...	...	...	...	5 12 3
Buckhurst Hill ...	...	...	...	...	" 21	...	...	...	...	7 13 9
Highgate ...	...	...	...	...	" 22	...	...	...	...	8 2 11
Mortlake ...	...	...	...	...	Dec. 9	...	...	...	...	11 0 11
Acton ...	...	...	...	...	" 10	...	...	...	...	5 12 1
Penge ...	...	...	...	...	" 13	...	...	...	...	14 3 7

REV. GEORGE ST. CLAIR.

Place.					Date.					Collection.
										£ s. d.
Northampton ...	...	...	...	...	Oct. 7	...	...	...	...	6 18 0
Buxton ...	...	...	...	...	" 9	...	...	...	...	5 17 6½
Stockport ...	...	...	...	...	" 10	...	...	...	...	5 10 5
Manchester ...	...	...	...	...	" 11	...	...	...	...	7 9 6
Staleybridge... ..	...	...	...	...	" 14	...	...	...	...	6 18 1½
Glossop ...	...	...	...	...	" 15	...	...	...	...	4 8 2¼
Ashton-under-Lyne ...	...	...	...	...	" 16	...	...	...	...	3 16 5
Runcorn ...	...	...	...	...	" 17	...	...	...	...	3 15 1
Rusholme ...	...	...	...	...	" 18	...	...	...	...	4 6 1½
Bolton ...	...	...	...	...	" 21	...	...	...	...	6 15 2½
Haslingden ...	...	...	...	...	" 22	...	...	...	...	1 19 5
Harpurley ...	...	...	...	...	" 23	...	...	...	...	6 8 2½
St. Helen's ...	...	...	...	...	" 24	...	...	...	...	5 3 7
Knutsford ...	...	...	...	...	" 28	...	...	...	...	8 16 8
Northwich ...	...	...	...	...	" 29	...	...	...	...	6 9 0½
Sandbach ...	...	...	...	...	" 30	...	...	...	...	5 15 6½
Hanley ...	...	...	...	...	" 31	...	...	...	...	7 8 4½
Stafford ...	...	...	...	...	Nov. 1	...	...	...	...	9 8 9
St. Albans ...	...	...	...	...	" 4	...	...	...	...	3 19 10
Leighton Buzzard ...	...	...	...	...	" 5	...	...	...	...	8 12 2
Oxford ...	...	...	...	...	" 6	...	...	...	...	7 11 1
Reading ...	...	...	...	...	" 7	...	...	...	...	17 4 3¾
Ipswich ...	...	...	...	...	" 11	...	...	...	...	8 19 8
Bury St. Edmunds... ..	...	...	...	...	" 12	...	...	...	...	8 17 10½

## LECTURES.

								£	s.	d.
Dunmow	...	...	...	Nov.	13	...	...	3	14	0
Cambridge	...	...	...	"	14	...	...	3	7	5
Stratford-on-Avon	...	...	...	"	19	...	...	4	8	11½
Birmingham	...	...	...	"	20	...	...	5	10	1
Wolverhampton	...	...	...	"	21	...	...	18	18	0
Walsall	...	...	...	"	22	...	...	5	14	8
West Bromwich	...	...	...	"	25	...	...	5	8	8
Eccleshall	...	...	...	"	26	...	...	10	0	2½
Lichfield	...	...	...	"	27	...	...	9	9	4
Stourbridge	...	...	...	"	28	...	...	10	7	1½
Leamington	...	...	...	"	29	...	...	15	17	6½
Dudley	...	...	...	Dec.	2	...	...	6	1	3½
Redditch	...	...	...	"	3	...	...	6	16	6½
Bromsgrove	...	...	...	"	4	...	...	6	2	9½
Malvern	...	...	...	"	5	...	...	13	19	1
Tewkesbury	...	...	...	"	6	...	...	7	0	10½
Biggleswade	...	...	...	"	9	...	...	7	2	8
Kettering	...	...	...	"	10	...	...	10	15	7
Leicester	...	...	...	"	11	...	...	13	16	4½
Market Harborough	...	...	...	"	12	...	...	6	17	5
Northampton	...	...	...	"	13	...	...	9	1	1

The amounts of the collections do not include expenses. They include, however, the following subscriptions and donations :—

								£	s.	d.
Eastbourne :—										
aF. C. S. Roper, Esq.	...	...	...	...	...	...	...	1	1	0
Lewes :—										
Anon.	...	...	...	...	...	...	...	0	10	0
Camberwell :—										
aF. Hutchinson, Esq.	...	...	...	...	...	...	...	0	10	0
Kilburn :—										
aRev. G. Despard	...	...	...	...	...	...	...	2	2	0
aS. Hanson, Esq.	...	...	...	...	...	...	...	2	2	0
aJoseph Petrie, Esq.	...	...	...	...	...	...	...	2	2	0
aW. R. Ellis, Esq.	...	...	...	...	...	...	...	1	0	0
aRev. A. Kenninn	...	...	...	...	...	...	...	0	5	0
aMrs. Warberton	...	...	...	...	...	...	...	0	10	0
Buckhurst Hill :—										
N. Powell, Esq.	...	...	...	...	...	...	...	5	0	0
Highgate :—										
aRev. J. Browell	...	...	...	...	...	...	...	1	1	0
Acton :—										
Rev. C. M. Harvey (to pay expenses of hall and printing)	...	...	...	...	...	...	...	1	10	0
Anon.	...	...	...	...	...	...	...	0	9	0
Northampton :—										

The subscriptions, *not* included in the collection, are given under the head of the Local Associations.

## LECTURES.

							£	s.	d.
Buxton :—									
	Rev. C. S. Bere	...	...	...	...	...	0	10	6
	R. Bennet, Esq., M.D. (promised)	...	...	...	...	...	1	1	0
Stockport :—									
	aJames Leigh, Esq.	...	...	...	...	...	0	10	6
	Rev. A. Wilson	...	...	...	...	...	0	3	0
Manchester :—									
	aThomas Rafferty, Esq. (10s. 6d. for 1872)	...	...	...	...	...	1	1	0
Staleybridge :—									
	aMr. James Sidebottom	...	...	...	...	...	1	1	0
	aMrs. Harrison ..	...	...	...	...	...	0	10	0
	aMrs. Lawton	...	...	...	...	...	0	10	6
	aThos. Harrison, Esq.	...	...	...	...	...	2	2	0
	Rev. Dr. Cranswick (promised)	...	...	...	...	...	1	0	0
Glossop :—									
	Rev. C. B. Ward	...	...	...	...	...	0	10	6
Rusholme :—									
	E. R. Langworthy, Esq.	...	...	...	...	...	1	0	0
	R. Johnson, Esq.	...	...	...	...	...	1	1	0
Bolton :—									
	aF. W. Fletcher, Esq.	...	...	...	...	...	1	1	0
	*R. Stockdale, Esq., J.P. (promised)	...	...	...	...	...	0	10	6
	*P. C. Mandan, Esq.	...	...	...	...	...	0	10	6
	Rev. Jeffrey Worthington	...	...	...	...	...	0	10	6
	* See list under head of Bolton.								
Harpurley :—									
	M. Seanor, Esq.	...	...	...	...	...	0	10	6
St. Helen's :—									
	Alfred Dean, Esq.	...	...	...	...	...	1	1	0
	Rev. Dr. Carr	...	...	...	...	...	0	5	0
	John Marsh, Esq.	...	...	...	...	...	1	0	0
Knutsford :—									
	John Long, Esq.	...	...	...	...	...	0	10	6
	Mr. Sutcliffe	...	...	...	...	...	0	10	6
	Rev. D. C. Unwin (promised)	...	...	...	...	...	0	10	6
Northwich :—									
	aEaton Cliff, Esq.	...	...	...	...	...	0	10	6
	C. Williams, Esq.	...	...	...	...	...	1	0	0
Hanley :—									
	aJ. W. Harrison, Esq., for three years	...	...	...	...	...	0	10	6
Stafford :—									
	aJ. F. Griffin, Esq.	...	...	...	...	...	0	10	6
	aF. Harris, Esq.	...	...	...	...	...	1	1	0
St. Albans :—									
	aRev. F. Lipscombe	...	...	...	...	...	0	10	6
	J. W. Blagg, Esq. (promised)	...	...	...	...	...	1	1	0
Leighton-Buzzard :—									
	John Sharman, Esq.	...	...	...	...	...	0	10	6
	W. Green, Esq.	...	...	...	...	...	0	10	6
	Rev. P. T. Ouvry	...	...	...	...	...	0	10	6

## LECTURES.

£ s. d.

## Oxford :—

Rev. R. H. Rodgers	...	...	...	...	...	...	0	10	6
αVen. Archdeacon Freeman, for three years (promised)	...	...	...	...	...	...	1	1	0

## Reading :—

Miss France	...	...	...	...	...	...	0	10	0
Miss M. A. France	...	...	...	...	...	...	1	0	0
R. D. Catchpool, Esq.	...	...	...	...	...	...	0	10	6
Theodore White, Esq.	...	...	...	...	...	...	0	10	6
H. B. Blandy, Esq.	...	...	...	...	...	...	0	10	6
Mrs. H. B. Blandy, for three years	...	...	...	...	...	...	0	10	6

## Bury St. Edmunds :—

αRev. J. Richardson	...	...	...	...	...	...	1	1	0
---------------------	-----	-----	-----	-----	-----	-----	---	---	---

## Dunmow :—

Henry Edmund Cockayne, Esq.	...	...	...	...	...	...	0	10	6
Benjamin Anderson, Esq.	...	...	...	...	...	...	0	10	6

## Stratford-on-Avon :—

Rev. P. Young	...	...	...	...	...	...	0	10	6
---------------	-----	-----	-----	-----	-----	-----	---	----	---

## Birmingham :—

S. N. Cooke, Esq.	...	...	...	...	...	...	0	10	6
Miss Phipson	...	...	...	...	...	...	0	10	6

## Wolverhampton :—

W. Fleming, Esq.	...	...	...	...	...	...	0	10	6
S. Dickinson, Esq.	...	...	...	...	...	...	0	10	6
Dr. Fraser	...	...	...	...	...	...	0	10	6
Mr. C. G. De Lessert	...	...	...	...	...	...	0	10	6
S. S. Mander, Esq.	...	...	...	...	...	...	5	5	0
J. Horton, Esq.	...	...	...	...	...	...	0	10	6

## Walsall :—

Elias Cropper, Esq.	...	...	...	...	...	...	1	1	0
---------------------	-----	-----	-----	-----	-----	-----	---	---	---

## West Bromwich :—

αLevi Bailey, Esq.	...	...	...	...	...	...	0	10	6
αG. Garratt, Esq.	...	...	...	...	...	...	0	10	6

## Eccleshall :—

αRev. C. P. Goad	...	...	...	...	...	...	0	10	6
αRev. John D. Glennie	...	...	...	...	...	...	0	10	6
αMiss Ripley	...	...	...	...	...	...	0	10	6
αJ. Durrad	...	...	...	...	...	...	0	10	6
αJ. K. Wynne, Esq.	...	...	...	...	...	...	0	10	6

## Lichfield :—

αRev. John Graham	...	...	...	...	...	...	0	10	6
αD. F. French, Esq.	...	...	...	...	...	...	0	10	6
αRev. W. Fairclough	...	...	...	...	...	...	0	10	6
αMiss Petit (promised)	...	...	...	...	...	...	1	0	0
αHerbert Morgan, Esq. (promised)	...	...	...	...	...	...	0	10	6

## Stourbridge :—

Hon. and Rev. W. H. Lyttelton	...	...	...	...	...	...	1	1	0
αS. Lloyd, Esq.	...	...	...	...	...	...	1	1	0
αRev. Lloyd Harris	...	...	...	...	...	...	0	10	6



## LECTURES.

							£	s.	d.
Leamington :—									
	<i>a</i> The Misses Wright	...	...	...	...	...	1	1	0
	<i>a</i> Rev. W. H. Bayley	...	...	...	...	...	0	10	6
	J. Frere Clarke, Esq. (promised)	...	...	...	...	...	1	1	0
Dudley :—									
	<i>a</i> Victor Milward, Esq.	...	...	...	...	...	1	1	0
	<i>a</i> Rev. S. Bartlett (promised)	...	..	...	...	...	1	1	0
Bromsgrove :—									
	<i>a</i> Rev. C. J. Blore	...	...	...	..	...	1	1	0
Malvern :—									
	<i>a</i> Edward Chance, Esq.	...	..	...	...	...	1	1	0
	<i>a</i> Cecil Turnor, Esq.	...	...	...	...	...	5	0	0
	<i>a</i> Rev. C. E. Ranken	...	...	...	...	...	0	10	6
	<i>a</i> Rev. Thomas King, for four years (promised)	...	...	...	...	...	1	1	0
Tewkesbury :—									
	<i>a</i> Alfred Healing, Esq. (promised)	...	...	...	...	...	0	10	6
	<i>a</i> Rev. H. S. Warleigh	...	...	...	...	...	1	1	0
	<i>a</i> Rev. Canon Davies	...	...	...	...	...	1	1	0
Kettering :—									
	<i>a</i> Rev. H. Lindsay	...	...	...	...	...	1	1	0
	<i>a</i> Mrs. J. H. Allen	...	...	...	...	...	0	10	6
	<i>a</i> W. Toller, Esq.	...	...	...	...	...	0	10	6
	<i>a</i> John A. Goosey	...	...	...	...	...	1	0	0
Leicester :—									
	<i>a</i> Robert Walker, Esq., for four years	...	...	...	...	...	1	1	0
	<i>a</i> M. Maxfield, Esq., for four years	...	...	...	...	...	1	1	0
Market Harborough :—									
	<i>a</i> T. Scarborough, Esq.	...	...	...	...	...	1	1	0
	<i>a</i> Joseph Nunneley, Esq.	...	...	...	...	...	1	1	0
	<i>a</i> W. Symington, Esq. (promised)	...	...	...	...	...	1	1	0
Hitchin :—									
	<i>a</i> Thomas Perkins, Esq.	...	...	...	...	...	0	10	0
	<i>a</i> G. Jackson, Esq.	...	...	...	...	...	1	1	0
	<i>a</i> F. Joyner, Esq.	...	...	...	...	...	0	10	6
	<i>a</i> H. Boardman, Esq.	...	...	...	...	...	0	5	0
	<i>a</i> D. Lloyd, Esq.	...	...	...	...	...	1	1	0

## ERRATA.

For Rev. C. *Alletson*, read Rev. C. *Alderson*.

For *J. Linden*, read *F. R. Conder*.

Stroud Lect. Receipts should be £8 17s. 4d., including subscription from Mrs. Rouse, 10s. 6d., Mrs. Bryant, 10s. 6d.

Omitted in April list : E. H. Finlay, Esq., 10s. 6d. ; Rev. J. A. Moore, £1 0s. 0d.

## LOCAL ASSOCIATIONS.

### PUBLICATIONS OF THE SOCIETY.

*Bentley and Son.*

The Recovery of Jerusalem, One Guinea.

Our Work in Palestine, 3s. 6d.

Nos. 1 to 8.—The earlier papers, which have mostly been embodied in subsequent publications, are now out of print, except Captain Warren's Notes on the Valley of the Jordan and Excavations at Ain es Sultan (Jericho).

9—15. Quarterly Statement. Vol. I. Nos. I. to VII.

These Nos. are now all out of print, except 5, 6, and 7, which contain, among other matter—The History of the Moabite Stone—Captain Warren on Lebanon and the Temples of Cœle-Syria—Captain Warren's Journey to East of Jordan—Letters from Mr. E. H. Palmer—Mr. Simpson on the Royal Quarries—Plan of the Haram Area, showing Excavations—&c., &c.

16—19. Quarterly Statement. New Series. Nos. I. to IV., 1871, containing—The Desert of the Tih and the Country of Moab, by Prof. E. H. Palmer, with large map and illustrations—Map of Moab—Captain Warren on the Plain of Philistia—Prof. Palmer on the Lebanon—M. Clermont Ganneau on certain New Discoveries—The Building of the Mosque of Omar, by Prof. E. H. Palmer—Captain Warren's Latitudes and Longitudes—Mr. Hyde Clarke on the Pre-Israelite Inhabitants of Palestine—&c., &c.

Nos. I. and III. are out of print.

20—24. Quarterly Statement for 1872, containing—Papers from Capt. Stewart, Mr. C. F. Tyrwhitt Drake, Lieut. C. R. Conder, Captain Wilson, Captain Warren, Captain Burton, Mr. Glaisher, Mr. Grove, Rev. F. W. Holland, Mr. Dugald Campbell, Mr. Hyde Clarke, Dr. Alexander Buchan, Rev. H. E. Northey, Rev. J. E. Bailey, Mr. George Smith, and Rev. Dunbar Heath.

The January number is out of print.

## LOCAL ASSOCIATIONS.

ALLOA : *Hon. Sec.*—Rev. Alexander Bryson.

ABERDEEN : *Hon. Sec.*—Rev. Prof. Milligan, D.D.

ALNWICK : *Hon. Sec.*—Edward Allen, Esq.

ARBROATH : *Hon. Sec.*—Mr. Anderson.

AYR : *Hon. Sec.*—Robert Murdoch, Esq.

BASINGSTOKE : *Hon. Sec.*—Rev. W. Marriner.

BATH : *Hon. Sec.*—Rev. T. P. Methuen.

BEDFORD : *Hon. Sec.*—E. W. Ransom, Esq.

BIRKENHEAD : *Hon. Secs.*—Rev. J. T. Kingsmill and T. Bell, Esq., St. Aidan's College.

BIRMINGHAM : *Hon. Sec.*—

BLACKBURN : *Hon. Secs.*—Rev. Canon Birch and Rev. A. B. Grosart.

BOTHWELL.—Through the "Bible Society" of the town.

BOURNEMOUTH : *Hon. Sec.*—Rev. Dr. Edersheim.

BRADFORD : *Hon. Sec.*—Rev. W. Dyson.

BRIGHTON : *Hon. Sec.*—Rev. C. E. Douglass.

BROADSTAIRS : *Hon. Sec.*—Rev. J. H. Carr.

# LOCAL ASSOCIATIONS.

- BURNLEY : *Hon. Sec.*—Rev. H. Stamer.
- BURY : *Hon. Treas.*—Rev. Canon J. Hornby ; *Hon. Sec.*—Rev. W. Thorburn.
- CALLINGTON : *Hon. Sec.*—Rev. F. V. Thornton.
- CAMBRIDGE : *Hon. Sec.*—Rev. T. G. Bonney, Tutor of St. John's College.
- CANADA: Toronto.—Subscriptions are kindly received by the Hon. G. W. Allan.
- CARDIFF : *Hon. Sec.*—
- CHELMSFORD : *Hon. Sec.*—H. S. Coleman, Esq.
- CHELTENHAM : *Hon. Sec.*—Dr. E. Wilson.
- CHESTER : *Hon. Sec.*—The Very Rev. the Dean of Chester.
- CHIGWELL : *Hon. Sec.*—Rev. H. M. Robinson.
- CHIPPENHAM : *Hon. Sec.*—A. T. Keary, Esq.
- CLIFTON and BRISTOL : *Hon. Secs.*—Rev. C. H. Wallace and Rev. J. B. Goldberg.
- COUPAR ANGUS : *President*—Very Rev. Dean Torry.
- CROYDON : *Hon. Sec.*—Mr. Warren.
- DARLINGTON : *Hon. Sec.*—T. P. Pritchett, Esq.
- DEVIZES : *Hon. Sec.*—Rev. W. P. S. Bingham.
- DEVONPORT : *Hon. Sec.*—J. Venning, Esq.
- DORCHESTER : *Hon. Sec.*—Rev. Handley Moule.
- DOVER : *Hon. Sec.*—Mr. W. P. Mummery.
- DUNDEE : *Hon. Sec.*—R. Mackenzie, Esq.
- DURHAM : *Hon. Sec.*—Rev. J. Dodd.
- DUNFERMLINE : *Hon. Sec.*—Rev. And. Brydie.
- EASTBOURNE : *Hon. Sec.*—Rev. H. R. Whelpton.
- EDINBURGH : *Hon. Secs.*—Rev. W. Lindsay Alexander, D.D., and T. B. Johnston, Esq., F.R.G.S., 4, St. Andrew Square.
- EXETER : *Hon. Sec.*—Rev. Prebendary Acland, Broad Clyst.
- FALMOUTH, for the County of Cornwall : *Hon. Secs.*—A. Lloyd Fox and W. P. Dymond, Esq.
- FAVERSHAM : *Hon. Sec.*—Charles Smith, Esq.
- FORFAR : *Hon. Sec.*—T. Wilkie, Esq.
- FROME : *Hon. Sec.*—Rev. T. G. Rooke.
- FOLKESTONE : *Hon. Sec.*—
- GLASGOW : *Hon. Secs.*—Rev. W. Dickson, D.D., Rev. Donald Macleod, D.D., and A. B. M'Grigor, Esq.
- GLOUCESTER : *Hon. Secs.*—Rev. J. Bowman and F. Cooke, Esq.
- GREENOCK : *Hon. Sec.*—D. MacDonald, Esq.
- GUILDFORD : *Hon. Sec.*—Capt. Campbell, R.N.
- HALIFAX : *Hon. Sec.*—
- HALSTEAD : *Hon. Secs.*—Rev. S. J. Eales and Rev. J. W. Coombes.
- HASTINGS : *Hon. Sec.*—
- HELENSBURG : *Hon. Sec.*—Rev. A. Murray McCallum.
- HERTFORD : *Hon. Sec.*—W. M. Armstrong, Esq.
- HEXHAM : *Hon. Sec.*—John Hope, Esq., jun.
- HITCHIN : *Hon. Sec.*—David Lloyd, Esq.
- HUDDERSFIELD : *Hon. Sec.*—Henry Barker, Esq., Railway St., St. George's Sq.
- HULL : *Hon. Sec.*—Dr. Bell.
- HUNTINGDON : *Hon. Sec.*—Rev. Gerald Vesey.
- INVERNESS : *Hon. Sec.*—Capt. Bolland, R.F.
- IPSWICH : *Hon. Sec.*—Rev. J. R. Turnock.
- IRVINE : *Hon. Sec.*—Adam Sutherland, Esq.

# LOCAL ASSOCIATIONS.

- KIRKALDY : *Hon. Sec.*—John Barnett, Esq.  
 LEEDS : *Hon. Sec.*—Edward Atkinson, Esq.  
 LEITH : *Hon. Sec.*—A. Davies, Esq.  
 LEWES : *Hon. Sec.*—Rev. R. Straffen.  
 LISKEARD : *Hon. Treas.*—John Eliot, Esq. ; *Hon. Sec.*—Rev. Dr. Ritchie.  
 LIVERPOOL : *Hon. Sec.*—Rev. W. R. Blackett, 65, Bedford-street.  
 MALVERN : *Hon. Sec.*—Rev. D. F. A. Grahame.  
 MANCHESTER : *Hon. Sec.*—Rev. Canon Crane.  
 MANSFIELD : *Hon. Sec.*—T. W. Clarke, Esq.  
 MARCH : *Hon. Sec.*—Rev. J. Cater.  
 MARGATE : *Hon. Sec.*—Rev. G. Collis.  
 MARKET HARBOROUGH : *Hon. Sec.*—Joseph Nunnelly, Esq.  
 MIDDLESBOROUGH : *Hon. Sec.*—  
 MONTROSE : *Hon. Sec.*—Mr. Mackie.  
 NEWARK : *Hon. Sec.*—Evelyn Falkner, Esq.  
 NEWARK : Ladies' Committee. *Hon. Treas.*—Mrs. Tallents ; *Hon. Sec.*—Mrs. G. Hodgkinson.  
 NEWCASTLE : *Hon. Treasurer.*—Thomas Hodgkin, Esq. ; *Hon. Sec.*—W. Lyall, Esq.  
 NEWPORT PAGNELL : *Hon. Sec.*—F. Tayler, Esq.  
 NORTHAMPTON : *Hon. Sec.*—H. Marshall, Esq.  
 OLNEY : *Hon. Sec.*—W. Hipwell, Esq.  
 OXFORD : *Hon. Sec.*—Rev. Edwin Hatch.  
 PAISLEY : *Hon. Sec.*—Rev. J. Dods.  
 PERTH : *Hon. Sec.*—John W. Jameson, Esq.  
 PLYMOUTH : *Hon. Secs.*—J. B. Rowe, Esq., and J. Shelly, Esq.  
 PORTSMOUTH : *Hon. Sec.*—  
 READING : *Hon. Sec.*—Rev. T. H. Armstrong.  
 REIGATE and REDHILL : *Hon. Sec.*—W. Wilson Saunders, Esq.  
 RICHMOND, SURREY : *Hon. Sec.*—R. R. Alexander, Esq.  
 SCARBOROUGH : *Hon. Sec.*—Rev. J. Bedford.  
 SEVENOAKS : *Hon. Sec.*—Graham Jackson, Esq.  
 SOUTHPORT : *Hon. Sec.*—George Lee, Esq.  
 SHERBORNE : *Hon. Sec.*—J. Farmer, Esq.  
 SOWERBY : *Hon. Sec.*—Rev. A. L. W. Bean.  
 ST. ALBANS : *Hon. Sec.*—Rev. W. J. Lawrance.  
 ST. ANDREW'S : *Hon. Secs.*—Dr. Lees and Dr. Mitchell.  
 ST. GERMAN'S : *Hon. Sec.*—R. Kerswill, Esq.  
 STOCKTON : *Hon. Sec.*—Joseph Laidler, Esq., M.D.  
 STIRLING : *Hon. Sec.*—Rev. W. Taylor.  
 STROUD : *Hon. Sec.*—T. S. Osborne, Esq.  
 TAUNTON : *Hon. Sec.*—R. J. Shepherd, Esq.  
 TAVISTOCK : *Hon. Sec.*—Mr. Frederick Clarke.  
 TIVERTON : *Hon. Sec.*—J. Allen, Esq.  
 TORQUAY : *Hon. Sec.*—Rev. G. E. Phillips.  
 TUNBRIDGE WELLS : *Hon. Sec.*—Capt. Palmer, R.E.  
 WARMINSTER : *Hon. Sec.*—W. Frank Morgan, Esq.  
 WELLS : *Hon. Sec.*—W. I. Welsh, Esq.  
 WESTON-SUPER-MARE : *Hon. Secs.*—Capt. T. Townsend, R.E., and J. Titley, Esq.  
 WHITBY : *Hon. Sec.*—E. W. Chapman, Esq.

## PHOTOGRAPHS—"SEAL OF HAGGAI"—MOABITE STONE.

WHITEHAVEN : *Hon. Sec.*—

WILLESDEN : *Hon. Sec.*—Rev. J. Crane Wharton.

WINCHESTER : *Hon. Sec.*—Miss Zornlin.

WINDSOR : *Hon. Sec.*—Rev. H. Courtenay Hawtrey.

WORCESTER : *Hon. Sec.*—Rev. Francis J. Eld.

YARMOUTH : *Hon. Sec.*—Rev. H. R. Nevill.

---

### PHOTOGRAPHS.

*Agent.*—Mr. Stanford, 6, Charing Cross.

Price, 1s. 6d. each. To Annual Subscribers of 10s. 6d. and upwards, 1s. cash.

The following are photographs that have been added since the last list was published:—

1. Masons' marks at south-east angle of Haram Wall.
2. The Hamath Inscriptions. From the squeezes.
3. View of half-finished column found near Jerusalem.
4. Roman Helmet found in the Jordan. The property of the Literary Society of Jerusalem.
5. Excavations in the Muristan.

---

### THE "SEAL OF HAGGAI."

Casts of this small seal, which is of very great antiquity, have been taken. They can be procured at 2s. 6d. each.

---

### THE MOABITE STONE.

Facsimile casts of the small fragments have been taken. They can be procured at cost price.

Photographs (to be obtained of Mr. Edward Stanford)—

1. One-third size of Captain Warren's tracings (mounted)... £0 3 6
  2. Full size of the squeezes themselves, in four photographs... 2 10 0
-



# LIST OF SUBSCRIPTIONS.

DEC. 18TH, 1872, TO MARCH 25TH, 1873.

*a* denotes Annual Subscriber.

\* \* If any omission or mistake be observed in the following lists, the Secretary will be glad to be informed of it, and will rectify the error in the next *Quarterly Statement*.

## SPECIAL JERUSALEM FUND.

Amount advertised in January <i>Quarterly</i> .....	£51	0	0
Jan. 25. Rev. H. Houghton .....	5	0	0
Mar. 1. C. Walton, Esq. ....	1	1	0
Mar. 28. Mr. Bence Jones .....	0	10	0

## SURVEY AND GENERAL PURPOSES.

	£	s.	d.		£	s.	d.
<i>a</i> H.R.H. Prince Christian .....	5	5	0	<i>a</i> C. B. Cornish Brown, Esq. ...	2	2	0
<i>a</i> Rev. H. L. Warleigh .....	1	1	0	<i>a</i> Rev. Vernon Musgrave .....	1	0	0
<i>a</i> Frederick Smith, Esq. ....	1	1	0	<i>a</i> Rev. J. Moore .....	1	0	0
Rev. Dunbar Heath .....	5	0	0	Rev. R. P. Hooper (for 1872 & 1873) .....	2	2	0
<i>a</i> J. S. Bedwell, Esq. ....	0	5	0	Rev. C. F. Douglass .....	1	15	0
<i>a</i> Col. Carrick Buchanan .....	5	0	0	Rev. J. McKinnell .....	1	1	0
Spencer H. Curtis, Esq. ....	1	1	0	<i>a</i> Miss Grove .....	0	10	6
J. S. Adams, Esq. ....	1	0	0	<i>a</i> Mrs. Hancock .....	1	1	0
G. M. E. ....	100	0	0	Mr. Appleford .....	0	3	6
<i>a</i> Rev. H. G. de Bunsen .....	1	0	0	<i>a</i> J. Nuttall, Esq. ....	0	16	6
<i>a</i> V. A. Williamson, Esq. ....	1	1	0	<i>a</i> Rev. W. R. Bell .....	0	10	6
W. Harrison, Esq. (four years)	4	0	0	<i>a</i> Miss Heygate .....	0	10	6
E. Burr, Esq. ....	1	0	0	<i>a</i> Miss Emmett .....	1	0	0
<i>a</i> C. W. Jones, Esq. ....	1	1	0	J. Coats, Esq. ....	2	0	0
Mrs. J. W. Cash .....	0	10	6	Collected at Church of Rev. W. H. Carslaw, Helensburgh...	4	11	0
Rev. F. E. Wigram .....	31	10	0	<i>a</i> Rev. J. Blore .....	0	10	6
S. Macnaughten, Esq. ....	1	1	0	<i>a</i> T. Smiley, Esq. ....	0	10	6
Hon. Otway Toler .....	1	0	0	<i>a</i> Rev. H. Douglas .....	1	1	0
<i>a</i> H. Morgan, Esq. (for 1872) ...	0	10	6	<i>a</i> Miss Clendenning .....	1	1	0
<i>a</i> F. F. Cox, Esq. ....	1	1	0	<i>a</i> W. L. Flint, Esq. ....	0	10	6
<i>a</i> W. R. Glasier, Esq. ....	1	1	0	<i>a</i> W. L. Davies, Esq. ....	0	10	6
<i>a</i> C. Innes Pocock, Esq. ....	1	1	0	Dr. Rogers .....	1	0	0
<i>a</i> Rev. H. H. Westmore (for 1872)	1	1	0	<i>a</i> H. M. Wilkinson, Esq. ....	0	10	6
A. Hardwick, Esq. ....	0	5	3	<i>a</i> E. Adamson, Esq., M.D. (for 1872) .....	4	4	0
Mr. John Watson .....	1	1	0	<i>a</i> Captain Petrie .....	0	10	0
<i>a</i> A. Kirby, Esq. ....	2	2	0	<i>a</i> Rev. W. Morton .....	0	10	6
<i>a</i> Rev. E. F. Hort (and for 1872)	1	1	0	<i>a</i> Miss Porter .....	1	1	0
<i>a</i> Rev. F. J. Colby .....	1	1	0				
<i>a</i> Rev. F. D. Pritt .....	1	1	0				
General Nuthall .....	1	0	0				

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
aW. S. W. Vaux, Esq. ....	1	1	0	aMiss Anne Stock.....	1	1	0
aRev. J. Carpenter .....	0	10	6	aMiss Beaufort .....	1	1	0
aMiss Robson.....	1	1	0	aRev. G. Ommanney .....	1	0	0
aRev. J. Phillips .....	0	10	0	aC. B. Bevan, Esq. ....	0	10	6
aJ. Abbot, Esq.....	1	1	0	aA. H. Heywood, Esq. ....	5	5	0
aG. B. Crewdson, Esq. ....	1	1	0	aMiss D. Cater .....	1	1	0
aRev. W. H. Davey.....	0	10	6	aRev. E. D. Stone .....	2	2	0
aV. St. Martin, Esq. ....	0	10	6	aP. H. Gosse, Esq. ....	2	2	0
Island of Arran .....	0	5	6	aRev. T. Helmore.....	0	10	0
Rev. J. B. Goldberg .....	2	2	0	aRev. J. Blackburne .....	1	1	0
aRev. J. O. Whitehouse .....	1	1	0	aMrs. Hancock ...	1	1	0
aL. Jaques, Esq. ....	1	1	0	aF. Kark, Esq. ....	2	2	0
aRev. G. W. Studdert.....	1	1	0	aG. W. Hebden, Esq. ....	0	5	0
aR. L. Smith, Esq. ....	1	0	0	aJ. Austin, Esq. ....	2	2	0
Greenwich Church of England				aRev. W. Bilton .....	2	0	0
Teachers' Union .....	2	2	0	aJ. Kirkpatrick, Esq. ....	1	1	0
aRev. G. H. Mullens .....	0	10	0	aRev. C. Potchett .....	1	1	0
Do. for 1871 and 1872 .....	1	0	0	aRev. W. H. Blamire .....	1	1	0
aC. C. Clifford, Esq. ....	1	0	0	aAlfred Wraith, Esq. ....	0	10	6
aB. A. Heywood, Esq.....	1	1	0	aA. Jackson, Esq. ....	1	1	0
W. Holyoake, Esq. (a 10s. 6d.)	1	1	0	aE. S. Prout, Esq. ....	0	10	6
aRev. F. A. Freeth .....	1	1	0	aW. Mummery, Esq. ....	0	10	0
aRev. Melsup Hill .....	1	1	0	aT. R. Norton, Esq. ....	1	1	0
aRev. J. W. Carr .....	1	1	0	aRev. W. H. Walford.....	2	0	0
aRev. P. de Rivière .....	0	2	6	aRev. T. Rigaud .....	0	10	0
aC. J. Angus, Esq. ....	0	10	0	aA. Rae Martin, Esq. ....	1	1	0
aMrs. Middlemiss .....	0	10	6	aOctavius Wigram, Esq. (3rd			
aRev. W. Twiss Turner .....	1	1	0	don.) .....	5	0	0
Do. for 1872 .....	1	1	0	aC. H. Marriott, Esq. ....	0	10	6
aRev. Prof. Geddes .....	0	10	6	aJ. M'Corkell, Esq. ....	1	1	0
J. D. Thomas .....	0	3	0	aJ. Harris Heal, Esq. ....	1	1	0
aRev. C. E. Blencowe .....	1	0	0	aW. Cole, Esq. ....	1	1	0
aMrs. Clarkson .....	1	0	0	aMrs. King .....	0	10	0
aRev. E. Hill .....	1	1	0	aRev. E. H. Birley .....	1	1	0
aJ. Fenn Clark, Esq. ....	1	1	0	aGeneral Wilbraham .....	1	1	0
Rev. H. Houghton (a £1 1s.,				a — Harwood, Esq., Leamington	1	1	0
and £5 for Jerusalem Fund)	10	0	0	aRev. N. T. Devereux .....	1	1	0
aMiss Garratt .....	0	10	6	aRev. John Brooke .....	1	0	0
aMrs. Gernon .....	0	10	6	aMiss Brooke.....	0	10	0
aE. Holden, Esq. ....	2	2	0	The Scholars of St. Andrew's			
aS. H. Hodgson, Esq. ....	1	1	0	Sunday School, per John			
aRev. James Bagge .....	5	0	0	Bonar, Esq., jun.....	5	10	0
aT. Jenner, Esq. ....	1	1	0	aMiss Lockwood .....	0	10	6
G. Brown, Esq. ....	2	0	0	aRev. F. O. Beeman .....	0	10	6
aRev. J. Hewetson .....	1	0	0	aW. H. Rawson, Esq., Halifax	1	1	0
aJ. Hiles, Esq. ....	1	0	0	aThomas Dean, Esq. ....	0	10	6
aT. Chapman, Esq. ....	1	1	0	aR. Henderson, Esq. ....	0	10	6
aRev. G. Austin .....	1	1	0	Miss Hill .....	0	2	6
aMiss M. Clode.....	1	1	0	John Hill, Esq. ....	0	2	6
aRev. D. Robertson.....	1	1	0	aR. S. Bartleet, Esq. ....	1	1	0
aJ. Benham, Esq.....	1	1	0	aMiss Martin.....	1	1	0
aJ. Nutter, Esq. ....	0	10	6	aMrs. Prior .....	1	0	0
aMiss Harris .....	0	10	6	aMiss Brightwen .....	0	10	6
aRev. Thomas King.....	1	1	0	W. C. ....	1	1	0
aMiss Devenish.....	1	1	0	aRev. F. Carey .....	0	10	6
aA. Dunn, Esq.....	1	1	0	aRev. R. A. Eden .....	0	10	6
aRev. J. B. Harrison .....	1	1	0	aRev. F. G. Burnaby .....	2	0	0
aJohn Bowman, Esq. ....	0	10	6	aRev. F. R. Barker .....	1	1	0
aJ. Duncan, Esq. ....	1	0	0	aR. E. Leader, Esq.....	0	10	6

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
John Perrott, Esq. ....	1	1	0	James Hilton, Esq. ....	3	0	0
Rev. F. E. Wigram ....	5	5	0	Miss Dougall ....	0	10	0
Miss E. T. Martin ....	0	10	0	aMiss Pursell ....	0	5	0
Mrs. Fenwick ....	1	1	0	Ditto, collected ....	1	0	0
Rev. Lord C. A. Hervey ....	1	0	0	aRev. Dr. Barclay ....	1	0	0
G. C. Courthope, Esq. ....	1	1	0	aMrs. Gerard Forsyth ....	0	10	6
Bishop of Dover ....	1	1	0	aMiss Hay ....	1	0	0
aRev. H. Bailey ....	1	1	0	aRev. R. W. Fiske ....	0	5	0
aRev. E. W. B. Benson ....	1	1	0	Mr. John Watson ....	0	5	3
aG. D. Wingfield Digby, Esq. ....	10	0	0	aRev. E. Wilson ..	0	10	6
Thomas Turner, Esq. ....	2	2	0	aW. F. Lavington, Esq. ....	1	1	0
aMiss Hooper ....	0	10	0	aC. D. Beckford, Esq. ....	2	2	0
aMrs. J. Birkbeck ....	1	1	0	aJ. M. Bright, Esq., M.D. ....	1	1	0
aRev. C. H. H. Wright ....	0	10	6	aMrs. Gott ....	1	1	0
aRev. W. Turner ....	0	10	6	aE. Pewtress, Esq. ....	1	1	0
aRev. W. Farrer (and for 1872) ....	2	2	0	aRev. E. T. Prust ....	1	1	0
aW. Farrer, Esq. (and for 1872) ....	2	2	0	aRev. S. Little ....	1	0	0
aJohn Smith, Esq., Cambridge	1	1	0	aW. Butler, Esq. ....	0	5	0
Miss L. Heath ....	0	10	0	aMiss Norris ....	2	2	0
aRev. H. B. Faulkner ....	1	1	0	aJohn Sylvester, Esq. ....	1	1	0
aRev. G. C. Cure ....	2	0	0	aRev. F. F. Goe, Hull ....	1	1	0
aT. D. CunninghamGraham, Esq. ....	2	0	0	aS. Powell, Esq. ....	1	1	0
Rev. G. Austen ....	0	10	0	aHon. H. Roper Curzon ....	1	1	0
aW. Beamont, Esq. ....	2	0	0	aRev. G. W. Dalton ....	1	1	0
aRev. C. Bannatyne ....	2	2	0	aRev. and Mrs. C. Callender ...	1	0	0
aJ. D. Crace, Esq. ....	1	1	0	aThomas Piper, Esq. ....	1	1	0
aG. F. Watts, Esq. ....	1	1	0	Hon. R. Marsham (2nd don.)	20	0	0
aT. Simpson, Esq. ....	1	1	0	aT. Oxley, Esq. ....	0	10	6
aJoseph Hall, Esq. ....	1	1	0	aRev. Dr. Cooke ....	1	0	0
aMiss A. Hunter ....	1	1	0	Mrs. Bence Jones ....	0	10	0
aC. Walton, Esq. ....	1	1	0	aRev. J. N. Palmer ....	1	1	0
aRev. J. G. Strickland ....	1	1	0	Collected by Miss Killick ....	2	15	0
aRev. W. Ritchie ....	1	1	0	aT. H. Plowes, Esq. ....	1	1	0
aS. H. Officer, Esq. ....	5	0	0	aW. Sandby, Esq. ....	1	1	0
T. Hirst Bracken, Esq., Halifax	3	3	0	aStanley K. Welch, Esq. ....	1	1	0
aMiss Badcock ....	0	10	6	aRev. R. Allen ....	1	1	0

## LOCAL SOCIETIES.

### ABERDEEN.

Jan. 1.—By cash .....	£1	5	9	Rev. Prof. Milligan	£0	5	0
Including the following:—				Jan. 24.—Rev. Prof.			
Professor Forbes .....	£0	10	6	Geddes.....	0	10	6
Mrs. Hargrave .....	0	10	6				

### BEDFORD.

The Rev. Canon Haddock, Bedford, has consented to act as Hon. Sec. in place of Mr. Edwin Ransom.

Jan. 1.—By cash ..... £2 12 6

### BODMIN.

The following Committee has been formed to advance the interests of the Fund in Bodmin:—

Joseph Stevens, Esq., Mayor.	
The Rev. C. J. Dickenson, Vicar.	H. J. Stokes, Esq.
Rev. W. J. Bull.	S. Hicks, Esq.

## LIST OF SUBSCRIPTIONS.

## BROADSTAIRS.

Jan. 1.—By cash .....	£1 10 0	Rev. J. H. Carr (1872,	
Including the following:—		1873, 2 years) .....	£0 10 0
Miss Brown .....	£0 5 0	Sale of photographs...	0 15 0

## BRIGHTON.

The following list arrived too late for insertion in the January *Quarterly* :—

Dec. 23.—By cash.....	£3 1 6	Mrs. Cooper .....	£0 5 0	
Jan. 3.—By cash .....	1 15 0	Rev. R. Hudson, 77,		
Including the following :		Dyke-road.....	0 10 0	
1872.		Feb. 23.—By cash.....		£13 6 0
J. N. Winter, Esq.,		March 8.—Rev. W. S. Fowler...		1 1 0
28, Montpelier-rd.,		March 17.—Miss Soames .....		10 0 0
Brighton .....	£1 1 0			

Account for 1872 (closed) :—

*Receipts.*

Rev. F. W. Baker, 20, Upper Brunswick-place, Brighton...	£0 10 0
Rev. F. Waston, 90, Lansdowne-place, Brighton .....	0 5 0
Rev. J. W. Hodgson, 18, Buckingham-place, Brighton .....	0 5 0
A. Creak, Esq., The Wick, Brighton .....	0 5 0
Rev. T. Moseley, Rose-hill-villa, Brighton.....	1 1 0
Somers Clarke, Esq., 57, Regency-square, Brighton .....	1 1 0
Rev. T. Cooke, 2, Lennox-place, Brighton .....	0 10 0
Miss S. A. Borrer (don.), The Lodge, Portslade.....	10 0 0
	£13 17 0

*Expenditure.*

Six months' expenses—collecting, printing, stationery, &c. Transmitted to Hon. Sec., Feb. 27, 1873 .....	£0 11 0
	13 6 0
	£13 17 0

The Hon. Sec. calls attention to the fact that the following names were omitted in the last published list :—

Rev. M. Mayow, Heighton-grange, Dyke-road.....	£0 5 0	Rev. D. Winham, 26, Palmeira-square .....	£1 1 0
Rev. J. B. Figgis (don.), 32, Clifton-road .....	0 5 0	Rev. J. H. Cross, 21, Sussex-square .....	0 10 0
Rev. R. W. Enraght (don.), 36, Russell-square .....	0 2 6	Somers Clarke, Esq., 57, Regency-square .....	1 1 0
Rev. Edwin Paxton Hood (don.), 55, Ventnor-villas.....	0 4 0		

## BROMLEY.

The Rev. W. J. Devereux, formerly Hon. Sec. for Portsmouth, has kindly offered to act for the Fund in Bromley.

# LIST OF SUBSCRIPTIONS.

## BURNLEY.

The Rev. H. A. Crosbie has accepted the post of Hon. Sec. for this town.

March 10.—By cash .....	£3 11 0	Mr. F. J. Grant.....	£0 10 6
Rev. H. A. Crosbie £1 1 0		Back Lane Sunday	
Rev. J. S. Doxey ... 0 10 6		School .....	0 5 0
Rev. J. Howard..... 0 10 6		Rev. J. S. Doxey,	
Rev. C. L. Reynolds 0 10 6		for six <i>Quarterlies</i>	0 3 0

## BURY (LANCASHIRE) ASSOCIATION.

*President.*—REV. CANON HORNBY.

*Secretary.*—REV. W. R. THORBURN.

By cash .....	£15 0 0	Mr. David Smith,	
Do. Mar. 26 .....	3 0 0	Heywood.....	£1 1 0
Mr. J. Walmsley,		John Grundy, Esq.,	
Bolton-street ..... £0 10 6		Summerseat .....	1 0 0
Miss Walmsley, Bol-		J. L. Openshaw,	
ton-street ..... 0 10 6		Esq., J.P. ....	1 0 0
Rev. E. J. Smith, St.		R. N. Philips, Esq.	
John's ..... 0 10 6		M.P., Park.....	1 0 0
Mr. Charles Turton,		J. C. Kay, Esq.....	1 1 0
Stanley-street..... 0 5 0		James Wrigley, Esq.	1 1 0
Mr. Smith, Knows-		Mr. James Walmsley	
ley-street..... 0 5 0		(2nd don.) .....	0 10 0
Rev. Canon Hornby,		Miss Walmsley (2nd	
Rectory ..... 1 1 0		don.) .....	0 10 0
Rev. James Webb,		Rev. E. J. Smith,	
Bank-street..... 0 10 6		M.A. (2nd don.)...	0 10 0
Rev. Prof. Dowson,		Mr. Samuel Jackson	0 10 6
Chamber-hall..... 0 10 0		Rev. F. Howorth ...	1 1 0
Rev. W. R. Thor-		Rev. J. H. Ouston	
burn, M.A..... 1 0 0		(2nd don.) .....	0 10 6
Rev. J. H. Ouston... 0 10 6		A Friend.....	0 3 0

## CAMBRIDGE.

Jan. 24.—aRev. E. Hill .....	£1 1 0
Feb. 24.—John Smith, Esq. ....	1 1 0
March 15.—aThe Master of Clare .....	2 2 0

## CANADA.

Feb. 25.—By cash .....	£19 5 6
------------------------	---------

TORONTO.				Dols.
The Honourable Chief Justice	Dols.	Brought forward.....		20
Draper.....	5	The Honourable G. W. Allan		5
The Honourable Chief Justice		The Rev. Egerton Ryerson.....		5
Hagarty .....	5	The Rev. Provost Whitaker ...		5
The Honourable D. L. Mac-		Professor Wilson .....		5
pherson .....	5	Christopher Robinson, Esq.....		5
The Honourable William Mc		John Macdonald, Esq.....		5
Master.....	5	A. McLean Howard, Esq.....		5
		The Rev. Lachlan Taylor .....		3
Carried forward .....	20	Carried forward .....		58



# LIST OF SUBSCRIPTIONS.

	Dols.		Dols.
Brought forward.....	58	Brought forward.....	79
OTTAWA.		QUEBEC.	
Thomas Reynolds, Esq. ....	5	R. R. Dobell, Esq. ....	5
The Honourable J. C. Aikins..	5		
WOODSTOCK.		BELLEVILLE.	
C. S. Beard, Esq. ....	3	The Honourable B. Flint .....	5
W. Edwards, Esq. ....	3		
MONTREAL.		FORT GARRY.	
The Honourable James Fenier	5	The Honourable Alexander Morris, Lieut.-Governor of Manitoba .....	5
Carried forward .....	79	Total .....	94

94 dols. at  $9\frac{3}{4}$  per cent. equals £19 5s. 6d., for which sight draft enclosed.

G. W. ALLAN.

## CHELTENHAM.

Jan. 3.—By cash ..... £45 0 0

The following list of subscribers has been sent by the Hon. Secretary :—

Miss Baron, 1, St. Margaret's Terrace .....	£1 1 0	Rev. T. W. Jex-Blake, Suffolk Square.....	£1 1 0
Rev. T. Cardew, Greville Villa	0 5 0	Miss Lander, Linden House.....	1 0 0
Rev. G. W. Chamberlayn, Pow- island Villa, Tivoli, Chelten- ham.....	1 1 0	Rev. L. Lancaster, Stanmer House .....	1 1 0
Rev. R. Chamney, Training College .....	1 1 0	F. Monro, Esq., 7, Tivoli Villas, Tivoli, Cheltenham .....	0 10 0
The Misses Cumming, Tulloes Lodge .....	2 2 0	J. Middleton, Esq., Westholme	1 1 0
John Dobell, Esq., Detmore, Charlton Kings .....	1 1 0	H. Middleton, Esq., Westholme	1 1 0
Earl Ducie, Tortworth Court, Falfield .....	5 0 0	General Polwhele, Tivoli Lodge, Tivoli, Cheltenham .....	0 10 0
Rev. T. F. Fenn, Christchurch Lodge .....	1 1 0	Mrs. Edward Potter, Fullwood	1 1 0
Baron de Ferrieres, Bag's Hill House .....	1 1 0	Rev. F. Robberds, Battledown Tower, Cheltenham .....	1 1 0
T. Agg Gardner, Esq., Plough Hotel .....	1 1 0	Rev. J. W. Southwood, Dewer- stone .....	1 1 0
W. H. Gwinnett, Esq., Gordon Cottage .....	1 1 0	John Walker, Esq., Westbourne House .....	1 1 0
C. Hawkins, Esq., 1, Wellington Street .....	1 1 0	J. Waddington, Esq., Ginting Grange, near Winchcombe ...	1 1 0
Rev. H. Hopkins, Skelton Rectory, Penrith, Cumber- land.....	1 1 0	Mrs. Whishaw, Linden House...	1 1 0
		Dr. E. T. Wilson, 6, Montpellier Terrace .....	0 10 0
		Rev. Harry Wright, 43, Lans- down Crescent .....	1 1 0

# LIST OF SUBSCRIPTIONS.

## CLIFTON AND BRISTOL.

By cash.—Jan. 11. ....	£2 2 0	A. E. E. ....	£0 1 0
Including the following:—		J. E. A. ....	0 1 0
Dowager Lady Mack-		A. L. W. ....	0 2 6
worth ..... £0 10 0		W. ....	0 1 0
Mrs. Mackworth ..... 0 5 0		E. B. ....	0 2 6
Miss Holmes ..... 0 5 0		D. H. ....	0 2 0
Collected by Miss L. Waring:—		Collected by Miss Bond:—	
Mrs. Sawyer ..... 0 2 6		Mrs. Russel ..... 0 1 0	
S. Waring..... 0 2 6		Mrs. Nash ..... 0 5 0	
C. B. .... 0 1 0		Mar. 25.—By cash .....	£3 10 0

## DARLINGTON.

Jan. 20.—E. Pease.....	£10 0 0
Feb. 13.—Henry Pease.....	10 0 0
Mar. 6.—T. Fry, Esq. ....	2 2 0
„ —J. C. Janson, Esq. ....	1 1 0

## EXETER.

Jan. 11.—Dr. Rogers .....	£1 0 0
---------------------------	--------

## FALMOUTH.

Mar. 14.—J. S. Guppy, Esq., M.D. ....	£1 1 0
---------------------------------------	--------

The following list has been forwarded by the Hon. Treasurer:—

P. P. Smith, Esq., Truro .....	£1 1 0	Dr. Guppy, Falmouth .....	£1 1 0
Rev. John Wright, Rector of		Lieut. Jellinger E. Symons, R.N.	
Falmouth .....	1 1 0	Falmouth .....	0 10 6
Mrs. F. M. Mackenzie, Falmouth	1 1 0	Charles Phillips, Esq., Falmouth	0 10 6

Errata in last statement:—For George Hext, Esq., read Rev. G. Hext; for George Hill, Esq., read Rev. G. Hill.

## FAVERSHAM.

Jan. 29.—By cash.....	£5 5 6
-----------------------	--------

The following is reprinted from the Monthly Journal of the Faversham Institute:—

The following sums have already been received. Those who have not paid their subscriptions should at once do so, to Mr. Charles Smith, hon. sec. and treasurer, 14, Market Street.

Miss Jones .....	£0 5 0	Mr. W. E. Rigden.....	£0 5 0
Mr. J. A. Anderson, jun.....	0 5 0	Mr. R. Watson Smith .....	1 1 0
Mr. H. Anderson .....	0 2 6	Mr. L. Shrubsole .....	0 2 6
Mr. B. Adkins .....	0 2 6	Mr. C. Smith.....	0 10 6
Mr. C. Bryant .....	0 2 6	Mr. J. Tassell .....	0 5 0
Mr. H. E. Coulter.....	0 5 0	Mr. J. Warren .....	0 2 6
Rev. C. E. Donne.....	0 5 0	Mr. R. Wyles .....	0 3 0
Mr. H. Fielding .....	0 5 0	Mrs. Rigden .....	0 10 0
Mr. F. F. Giraud .....	0 2 6		
Mr. S. Higham .....	0 5 0		5 14 6
Mr. R. Hilton .....	0 5 0	Advertising expenses .....	0 9 0
Mr. W. Holmes.....	0 2 6		
Mr. P. Neame .....	0 5 0		£5 5 6
Mr. G. Robinson .....	0 2 6		

# LIST OF SUBSCRIPTIONS.

## FORFAR.

Mar. 12.—By cash ..... £1 11 6

## GLASGOW.

Mar. 12.—W. H. Minnock, Esq. .... £2 0 0

## GREENOCK.

Feb. 12.—By cash ..... £45 0 0

Mar. 17.—Ditto ..... 6 0 0

*Dr.* PALESTINE EXPLORATION FUND IN ACCOUNT WITH D. MACDONALD. *Cr.*

1873.	£	s.	d.	1872.	£	s.	d.
Feb. 11.—To cash received .....	45	0	0	January 15.—By balance .....	0	2	9
1872.				1873.			
Mar. 4.—Cash received .....	6	0	0	March 14.—Total amount of			
Balance .....	0	1	0	subscriptions for the year 1872			
				(as per list).....	50	17	0
				Bank interest.....	0	1	3
	£51	1	0		£51	1	0

14th March, 1873.

D. MACDONALD, *Hon. Local Sec.*

List of Subscribers for year 1872, per D. MacDonald :—

Abram Lyle, Esq. ....	£5	0	0	Alexander Scott, jun., Esq. ....	£1	1	0
David Johnstone, Esq. ....	5	0	0	Hugh W. Walker, Esq. ....	1	1	0
James Morton, Esq. ....	5	0	0	James Stewart, Esq. ....	1	1	0
Alexander Currie, Esq. ....	2	2	0	Edward Blackmore, Esq. ....	1	1	0
Hugh Walker, Esq. ....	2	0	0	Andrew Carmichael, Esq. ....	1	1	0
Duncan Shaw, Esq. ....	2	0	0	Abram Lyle, jun., Esq. ....	1	1	0
Robert Blair, Esq. ....	1	1	0	Rev. John Nelson, D.D. ....	1	1	0
Thomas Prentice, Esq. ....	1	1	0	Donald MacDonald, Esq. ....	1	1	0
W. B. Paul, Esq. ....	1	1	0	G. R. Macdougall, Esq. ....	0	10	0
John Paul, Esq. ....	1	1	0	James Miller, Esq., Rothesay ...	1	0	0
Graham Brymner, Esq. ....	1	1	0	Robert Binnie, Esq., Gourock...	1	1	0
John B. Crawhall, Esq. ....	1	1	0	Rev. John Kinross, M.A., Largs	1	0	0
John R. Allison, Esq. ....	1	1	0	Rev. Alexander Walker, Mill-			
Robert Little, Esq. ....	1	1	0	port.....	1	1	0
Alexander Ferguson, Esq. ....	1	1	0	George Elder, Esq., Knock			
Colin S. Caird, Esq. ....	1	1	0	Castle, Wemyss Bay.....	1	1	0
John C. Hunter, Esq. ....	1	1	0	Mrs. Marquis, Liverpool.....	1	0	0
T. O. Hunter, Esq. ....	1	1	0				
John MacGregor, Esq. ....	1	1	0				
William McClure, Esq. ....	1	1	0				
					£50	17	0

## HALIFAX.

March 3.—J. H. Bracken, Esq. .... £2 2 0

Feb. 15.—aW. H. Rawson, Esq. .... 1 1 0

# LIST OF SUBSCRIPTIONS.

## HALSTEAD.

Dec. 20.—J. J. Adams, Esq.....	£1	0	0
Jan. 20.—Forwarded by Rev. S. J. Eales .....	1	9	9
Including the following subscriptions :—			
Mrs. Pinchback .....	£1	0	0
Mr. Portway .....	0	10	0

## HELENSBURGH.

Jan. 8.—Collected at the Church of the Rev. W. H. Carslaw. £4 11 0	
Mar. 6.—By cash .....	6 0 0

Per local Hon. Sec. :—

D. T. MacLellan, Esq., Cragmore	£1	0	0	James Robertson, Esq., North-		
Rev. Andrew Melville, Free St.				wood, Helensburgh .....	£0	16 0
Enoch's, Glasgow .....	1	0	0	James Miller, Esq., M.D., Suther-		
James Young, Esq., Helensburgh	0	10	0	land-crescent .....	0	5 0
Miss Wilson, Suffolk-street.....	1	0	0		£6	2 6
Rev. John Lindsay, Helens-				Remitted per draft of 6th March		
burgh .....	0	10	6	inst.....	6	0 0
Rev. A. M. McCallum .....	0	10	6			
Miss Urie, Sefton-cottage, Helens-				In hand .....	0	2 6
burgh .....	0	10	6			

## HULL.

The following are the Honorary Officers for the Hull Local Association :—

Chairman—J. E. Wade, Esq., Woodhall. | Hon. Secretary—J. P. Bell, Esq., M.D.  
Hon. Treasurer—W. Sissons, Esq., Park-street.

## LEEDS.

### REPORT OF THE MEETING OF JANUARY 24, 1873 :—

A lecture in connection with the Palestine Exploration Fund was delivered in the Philosophical Hall, Leeds, by Professor E. H. Palmer, of Cambridge, on "The Wilderness of the Wanderings." The Rev. Canon Woodford, Vicar of Leeds, presided over a moderate audience. The Chairman said it was always with great pleasure that he took the chair at meetings of that kind. The whole subject was one of enormous interest. That interest was of a two-fold nature. There was first the interest which attached to every exploration into the life which had preceded ours, and the customs, habits, and manners of the generations that were gone by. Then especially this exploration of Palestine was of course of further interest, inasmuch as it was the exploration of a country which, by our religion, was itself an object of supreme importance to us. It would probably be remembered that within the last two years a lecture was delivered in that very hall upon the discovery of the Moabite stone, and that stone seemed to give a strange confirmation of some of the passages in the Old Testament. Whilst he thought they ought to be cautious of relying too hastily on what promised to confirm the promises of Holy Writ, yet, on the other hand, whilst avoiding that danger, there was no doubt it was a source of increasing satisfaction to find that the more we became acquainted with the country which was the scene of the events of Scripture, the more such events fell in their proper place of system, substance, and reality to us. Before calling upon Professor Palmer to give the statement which he had come to furnish, he would call upon Mr. Atkinson, the secretary, to give a brief report of the finances of the Palestine Exploration Fund, so far as Leeds was concerned.

# LIST OF SUBSCRIPTIONS.

Mr. Atkinson stated that the first appeal made in Leeds on behalf of the Fund was in 1869, and the sum total which had been sent up from Leeds during the four years had been a little over £160.

Professor Palmer, in the course of his lecture, said there were two ways in which people in Christian lands were in the habit of looking at the Bible. One was with a vague and solemn awe, which made them forget the human interests which the narrative in that book set forth; and another way, he was sorry to say, was that in which scientific men were pleased to regard it—they started with the assumption that scientific accuracy and the scientific facts of the Bible were antagonistic one to the other. He had come before them to argue neither of these points, nor to enter into any discussion upon them, but simply to tell them in a plain way what the result of the investigation into the facts of Scripture history upon the scene of that history lead to. Professor Palmer then gave a deeply interesting account of the expeditions he had recently made in the Sinai Peninsula, and also the Wilderness of the Wanderings. In the first expedition he formed one of the Sinai Surveying Expedition; but the journey into the desert of the wilderness was performed by himself and Mr. Tyrwhitt Drake in the guise of two Syrians, and they are probably the first Europeans who ever penetrated so far. It is impossible here to enter into details, but the result of the professor's researches seem to throw considerable light upon the exodus and wanderings of the children of Israel.

In acknowledging a vote of thanks, accorded to him at the end of his able lecture, Professor Palmer made an appeal on behalf of the Palestine Exploration Fund—a society, he said, which was established simply for the purpose of placing in the hands of all people who believed in and loved the Bible—that was to say, he hoped, almost all educated people—such facts about the country and about the places described in the Bible, as would enable them to meet the objections which were unfortunately constantly brought against the truth of the holy narrative. He himself had no hesitation in saying that if that narrative were treated as any ordinary history would be, and confronted with facts instead of theories, it would come out triumphant; and, therefore, when a society like the Palestine Exploration Fund devoted itself entirely to placing in the hands of believing Christians weapons against the adversaries of the faith and shields against the ridicule which their adversaries heaped upon them, it would not be asking too much on the part of professing Christians, to support the society as much as they possibly could.

The proceedings then ended.

## LEEDS ASSOCIATION.

Hon. Sec.: EDWARD ATKINSON, F.I.S.

March 7.—By cash ...£46 0 0		Chas. E. Bousfield, Esq., Wel-	
With the following list:—		lington-street, Leeds .....	£0 10 6
W. J. Armitage, Esq., Farnley-		Mrs. Cheape and Miss Dykes,	
lodge, Leeds .....	£2 2 0	Cromer-terrace, Leeds .....	0 10 0
Rev. A. Atkinson, Audlem		Rev. E. R. Conder, Newton-	
Vicarage, Cheshire .....	1 0 0	grove, Leeds .....	0 10 6
Edward Atkinson, Esq., 2,		Right Rev. Bishop Cornthwaite,	
Albion-place, Leeds .....	1 1 0	Springfield-house, Leeds ...	1 1 0
J. T. Atkinson, Esq., Wide-		Francis Darwin, Esq., Cres-	
street, Selby, Yorkshire ...	0 10 6	keld-hall, Otley .....	2 2 0
W. Baxter, Esq., Park-square,		Rev. Thomas Dunn, Mirfield,	
Leeds' .....	0 10 6	Yorkshire .....	0 10 6
Mrs. Birchall, Whiteholme,		Ed. O. Dykes, Esq., Cromer-	
Clitheroe.....	1 1 0	terrace, Leeds.....	1 1 0
Miss Birchall, Bowden-hall,		William Ferguson, Esq., Albion-	
Gloucester .....	1 1 0	street, Leeds .....	0 10 6
Edward Birchall, Esq., Park-		Edward Filliter, Esq., West-	
square, Leeds.....	1 1 0	mount, Leeds .....	1 0 0
Rev. Sir T. E. W. Blomfield,		William Garlick, Esq., Hyde-	
Bart., Holgate-lodge, Ponte-		terrace, Leeds .....	1 1 0
fract (2 years) .....	2 2 0	Rev. John Gott, Bramley-	
		vicarage, Leeds .....	2 2 0



# LIST OF SUBSCRIPTIONS.

Wm. Harker, Esq., Harefield-house, Pateley Bridge .....	£1 1 0	aMiss Richardby, Wells-terrace, Ilkley .....	£1 0 0
Miss Harris, Oxtou-hall, Tadcaster .....	1 1 0	aMiss Roberts, Gledhow-wood, Leeds .....	1 0 0
W. A. Hayes, Esq., Bramley, Leeds .....	1 0 0	aCharles Ryder, Esq., Regent-villas, Leeds .....	1 1 0
Miss Heaton, Woodhouse-sq., Leeds .....	1 0 0	aThos. Scattergood, Esq., Park-square, Leeds .....	0 10 6
William Hey, Esq., Gledhow-wood, Leeds .....	1 1 0	F. W. Tetley, Esq., Foxhill, Wetswood, Leeds .....	5 5 0
John Holmes, Esq., Methley, Leeds .....	0 10 0	aMiss Urquhart, Chapel-Allerton, Leeds .....	1 1 0
aH. G. Hudson, Esq., Welling-ton-street, Leeds .....	1 1 0	aRev. T. Whitby, St. Simon's-vicarage, Leeds .....	1 1 0
aE. G. Jepson, Esq., Woodsley-terrace, Leeds .....	1 1 0	aThos. Wilson, Esq., Hilary-place, Leeds .....	1 1 0
aJ. Lawrence, Esq., East Kes-wick, Wetherby (2 yrs.) ...	1 0 0	aRev. Canon Woodford, D.D., The Vicarage, Leeds .....	1 1 0
aMiss Maude, Knowsthorpe, Leeds .....	0 10 0		£45 5 0
aGeo. Metcalfe, Esq., Castle-stand, Pateley Bridge .....	1 1 0	Proceeds of Lecture by Prof. Palmer.—Admissions .....	2 8 0
aH. J. Morton, Esq., Garforth, Leeds .....	0 10 6	Do. Sale of Publications .....	2 12 6
			£50 5 6

*The Hon. Sec. of Leeds Association in account with P.E.F.*

<i>Receipts.</i>		<i>Expenditure.</i>	
By donation .....	£5 5 0	To rent of hall ...	£2 2 0
„ Annual subscriptions .....	40 0 0	„ Advertising and printing ...	3 1 9
„ Prof. Palmer's Lecture .....	2 8 0	„ Stamps and stationery .....	0 5 6
„ Sale of Publications at ditto .....	2 12 6	„ Remitted to Society .....	46 0 0
„ Balance from last year .....	1 3 9		
	£51 9 3		£51 9 3

EDWARD ATKINSON, *Hon. Sec.*

March 8, 1873.

## LISKEARD.

The following Committee has been formed to advance the interests of the Fund in this town:—

C. Childs, Esq.	Rev. J. Lakes.
C. H. Jewell, Esq.	Rev. Otto West.
W. J. Corin, Esq., Hon. Sec.	

## MANCHESTER.

The Rev. W. F. Birch has paid to the account of the Palestine Exploration Fund at Heywood's Bank, the following subscriptions:—

aRev. W. F. Birch, St. Saviour's Rectory, Manchester .....	£1 1 0	aH.M. Lawrence, Esq., Brighton-place, Oxford-st., Manchester	£1 1 0
aF. W. Grafton, Esq., Brook-field, Whalley Range, Man-chester .....	1 1 0	aJohn Lowe, Esq., Whalley Range, Manchester .....	1 1 0
		W. Openshaw, Esq., Victoria-park, Manchester (don.) .....	1 0 0

# LIST OF SUBSCRIPTIONS.

## MIDDLESBOROUGH.

The Rev. Edmund Jackson has kindly consented to act as Hon. Secretary for this town and its neighbourhood.

## OXFORD.

Feb. 11.—By Cash .....£18 16 0

## PAISLEY.

March 19.—Rev. Oliver Flett.....£1 1 0

## SCARBOROUGH.

Jan. 1.—By Cash for 1872 ...	£2 12 6	W. H. Smyth, Esq., Scarborough.....	£0 10 6
Miss Stephen, Scar- borough .....	£1 1 0	Rev. A. S. Aglen, St. Ninian's Par- sonage, Alyth...	0 10 6
Miss Grant, Scar- borough .....	0 10 6		<u>0 10 6</u>
			£2 12 6

## SEVENOAKS.

Dec. 23rd.—By cash.....£3 3 0

## STALEYBRIDGE.

*Errata.*—In last *Quarterly* for *Mr.* read *Mrs.* James Sidebottom. The subscription of the Rev. Dr. Cranswick was paid to Mr. St. Clair in December.

## STOCKTON.

Dec. 27.—By Cash .....	£2 1 6	Rev. G. Roberts, Vicar, South Stockton .....	£0 10 6
A. J. Stocks, Yarm- rd., Stockton ...	£1 0		<u>0 10 6</u>
W. Dodshon, Stock- ton .....	0 10 0		2 1 6

## TIVERTON.

Jan. 7.—By Cash ..... £1 6 0  
Viz., Rev. W. H. Askwith ..... 1 1 0  
Rev. G. Hadow ..... 0 5 0

## TORQUAY.

By Cash.—March 13.....£8 4 0

Ven. Archdeacon Huxtable (2 years) .....	£4 0 0	Rev. W. R. Brownlow .....	£0 10 6
Mrs. Alexander .....	1 1 0	Miss Gamble .....	0 10 6
Dr. C. Paget Blake .....	0 10 6	W. Lavers, Esq. ....	0 10 6
		Rev. G. E. Phillips .....	1 1 0

# LIST OF SUBSCRIPTIONS.

## TUNBRIDGE WELLS.

aColonel Hebbert.....	£0 10 0
aMiss Hebbert.....	0 10 0
aColonel Cantis .....	1 0 0

## WELLS.

Feb. 4.—By cash .....	£4 10 0	Oct. 29.—Mr. James Clark .....	£0 5 0
Including the following :—		„ 30.—T. H. Roach, Esq.....	0 5 0
1872, Jan. 13.—Rev. C. M. Church .....	£1 0 0	Nov. 8.—Mr. Manning .....	0 5 0
April 2.—Rev. Mr. Beresford .....	0 10 0	„ 8.—Capt. Giles .....	0 5 0
May 4.—Dr. Edwards .....	0 5 0	1873, Jan. 20.—Mr. C. W. Lavington .....	0 5 0
June 13.—Mrs. Green .....	0 10 0	Jan. 20.—Mr. W. J. Welsh .....	0 5 0
Oct. 26.—Mr. G. Thorn .....	0 5 0		
„ 29.—Rev. C. M. Church .....	0 10 0		

## WHITBY.

Jan. 1.—.....	£2 12 6	March 24.—By Cash .....	£2 0 0
Including :—		Viz :—	
C. Bagnall, Esq.....	£1 0 0	Mrs. John Brewster .....	0 10 0
Proceeds of Lecture by Rev. J. A. Bower .....	1 12 6	C. Richardson, Esq.....	0 5 0
		Ed. Wm. Chapman, Esq. ....	1 5 0

## WINCHESTER.

March 8th.—By cash .....	£4 19 6	Rev. G. W. Heathcote .....	£1 1 0
Rev. R. P. Hutchinson .....	£1 1 0	A Friend (donation) ...	0 5 0
Miss Crawfood .....	1 1 0	Sent subsequently :—	
Mrs. Walsh .....	0 10 6	The Misses Brett .....	£1 1 0
Miss Zornlin .....	1 1 0		

## WINDSOR.

Dec. 27.—aC. W. Jones, Esq. ....	£1 1 0
March 14.—aMiss Bancroft .....	1 1 0

## Meeting at St. Mark's Schools, March 21, 1873.

By donations—		Brought forward ...	£26 16 7
Mrs. Busk, Winkfield .....	£10 0 0	Less all expenses of advertising, printing, hire of chairs, assistants, &c. ....	9 0 10
Rev. C. F. Porter, Dropmore .....	0 10 0		
Rev. F. Anson, Cloisters .....	1 0 0		
Collected at doors .....	15 6 7	By cash sent to office .....	£17 15 9
Carried forward ...	£26 16 7		

# LIST OF SUBSCRIPTIONS.

## TUNBRIDGE.

June 24.—By cash ..... £9 18 6

## TUNBRIDGE WELLS.

*Local Hon. Sec.*, Captain Palmer, R.E. Statement of account to Midsummer, 1873 :—

<i>Dr.</i>	£	s.	d.	<i>Cr.</i>	£	s.	d.
aW. F. Browell, Esq., for 1872	0	10	0	Paid for advertising .....	0	6	0
aMr. F. Skipwith, for 1872.....	1	1	0	Paid for postage .....	0	1	6
aRev. C. B. Bowles, for 1872 ...	1	0	0	Cheque for balance .....	9	13	6
aRight Rev. Bishop Trower, for 1872 .....	1	0	0				
aR. Janson, Esq., for 1873 .....	1	1	0				
Proceeds from lecture at Speld- hurst, by Captain Palmer, R. E., May 1st, 1873.....	5	14	0				
	£10	6	0		£10	6	0

## WHITBY.

May 3.—aMrs. Wells ..... £0 10 0

## WINDSOR.

March 31st.—Proceeds of Meeting ..... £17 15 9

## YORK.

The Committee would be very glad to hear from any gentleman willing to act as hon. secretary for this city.

April 26.—G. M. T.....	£0	3	0
May 31.—G. M. T. ....	0	10	6
April 29.—aW. Phillips, Esq. ....	1	1	0
May 31.—aJohn Pearson, Esq. ....	1	1	0

# LIST OF LECTURES AND MEETINGS.

REV. HENRY GEARY.

Place.	Date.	Proceeds.
		£ s. d.
St. Paul's, South Hampstead	Jan. 7	8 10 0
Ramsgate	Feb. 13	8 16 8
Uppingham School	Mar. 10	15 14 6
St. John's, Walham Green	" 28	5 2 0
St. John's, Fitzroy Square	May 2	6 4 6

REV. GEORGE ST. CLAIR.

Keighley	March 10	9 14 0 $\frac{1}{2}$
Halifax	" 11	15 6 0
Skipton	" 12	10 6 0
Cross Hills	" 13	7 6 3
Sowerby	" 17	5 0 0
Darwen	" 18	15 0 6
Fleetwood	" 19	7 10 0
Preston	" 20	20 6 3
Eccles	" 21	9 16 0
Leigh	" 24	9 12 6 $\frac{1}{2}$
Macclesfield	" 25	12 2 0
Mossley	" 26	7 14 1
Middlewich	" 27	5 17 6
Stafford	" 28	6 0 6
Aylesbury	" 31	10 11 8
Buckingham	April 1	3 6 4
High Wycombe	" 2	10 19 0
Ealing	" 3	1 18 0
Wotton	" 4	5 15 6
Barnsley	" 17	12 10 4 $\frac{1}{2}$
Wakefield	" 18	7 7 0 $\frac{1}{2}$
Bowdon	" 21	16 4 10
Bradford	" 22	11 15 6
Pateley Bridge	" 23	10 4 9
Knaresborough	" 24	6 7 8 $\frac{1}{2}$
Harrogate	" 25	6 0 7
Ilkley	" 28	7 12 5
Stockton	" 29	22 4 8 $\frac{1}{2}$
Durham	" 30	12 4 8 $\frac{1}{2}$
Shields	May 1	6 5 7



## LECTURES.

								£	s.	d.
Bedford :—										
	Rev. C. A. Greaves	...	...	...	...	...	...	0	10	6
	Miss Roe	...	...	...	...	...	...	0	10	0
Ampthill :—										
	Rev. G. Maule	...	...	...	...	...	...	0	10	0
	Rev. R. Lang	...	...	...	...	...	...	0	10	6
	Mrs. Wingfield	...	...	...	...	...	...	0	10	0
Great Marlow :—										
	J. W. Morgan, Esq.	...	...	...	...	...	...	0	5	0
Henley-on-Thames :—										
	F. W. Jeston, Esq.	...	...	...	...	...	...	0	10	6
Alcester :—										
	Rev. R. Seymour	...	...	...	...	...	...	0	10	6
	Miss Handy	...	...	...	...	...	...	0	10	6
	T. L. Smith, Esq.	...	...	...	...	...	...	0	10	6
	Rev. A. H. Williams	...	...	...	...	...	...	0	10	0
Kidderminster :—										
	G. W. Naylor, Esq.	...	...	...	...	...	...	0	10	6
	G. Hopkins, Esq.	...	...	...	...	...	...	0	10	6
	Joseph Naylor, Esq.	...	...	...	...	...	...	1	1	0
	F. B. Fawcett	...	...	...	...	...	...	0	10	6
Wordsley :—										
	Rev. A. G. Girdlestone	...	...	...	...	...	...	0	10	6
Burslem :—										
	Mrs. Corbett	...	...	...	...	...	...	0	10	6
	T. Bostock, Esq.	...	...	...	...	...	...	0	10	6
	J. W. Edge, Esq.	...	...	...	...	...	...	0	10	6
	W. Boulton, Esq.	...	...	...	...	...	...	0	10	6
	G. W. Garlick, Esq.	...	...	...	...	...	...	0	10	6
	W. Woodall, Esq.	...	...	...	...	...	...	1	1	0
Warrington :—										
	Miss C. Hamilton	...	...	...	...	...	...	0	10	0
	S. M. Webster, Esq.	...	...	...	...	...	...	1	1	0
Wilmslow :—										
	John Goodier, Esq.	...	...	...	...	...	...	0	10	6
	A. T. Richardson, Esq.	...	...	...	...	...	...	1	0	0
	A. Crewdson, Esq.	...	...	...	...	...	...	0	10	6
	J. Jardine, Esq.	...	...	...	...	...	...	1	1	0
	J. B. Northcott, Esq.	...	...	...	...	...	...	1	1	0
	Rev. J. H. Consterdine	...	...	...	...	...	...	1	1	0
Sale :—										
	Rev. J. J. Cort	...	...	...	...	...	...	0	10	6
	Rev. E. Morris	...	...	...	...	...	...	0	10	6
Bolton :—										
	G. Graveson, Esq.	...	...	...	...	...	...	0	10	6
	E. Woollard, Esq.	...	...	...	...	...	...	0	10	6
	T. W. Heelis, Esq.	...	...	...	...	...	...	0	10	6
	R. K. Freeman, Esq.	...	...	...	...	...	...	0	10	6
	A. Fergusson, Esq.	...	...	...	...	...	...	1	1	0
	R. Pennington, Esq.	...	...	...	...	...	...	1	1	0

## LECTURES.

								s.	d.
W. F. Tillotson, Esq.	...	...	...	...	...	...	...	0	10 6
R. Winder, Esq.	...	...	...	...	...	...	...	0	10 6
Mrs. Heywood...	...	...	...	...	...	...	...	0	10 6
P. C. Marsden...	...	...	...	...	...	...	...	0	10 6
Rev. J. Worthington	...	...	...	...	...	...	...	0	10 6
Burnley :—									
Rev. J. Howard	...	...	...	...	...	...	...	0	10 6
Rev. J. S. Doxey	...	...	...	...	...	...	...	0	10 6
Rev. C. L. Reynolds	...	...	...	...	...	...	...	0	10 6
Tamworth :—									
W. Wileman, Esq.	...	...	...	...	...	...	...	0	10 6
J. Thompson, Esq.	...	...	...	...	...	...	...	0	10 6
Slough :—									
Rev. W. O. Thompson	...	...	...	...	...	...	...	1	1 0
Winchester :—									
F. Marshead, Esq.	...	...	...	...	...	...	...	1	1 0
Ven. Archdeacon Jacob	...	...	...	...	...	...	...	1	1 0
Rev. H. Haigh...	...	...	...	...	...	...	...	1	1 0
Rev. W. A. Fearon	...	...	...	...	...	...	...	1	1 0
F. J. Warner, Esq.	...	...	...	...	...	...	...	1	1 0
Rev. G. Richardson	...	...	...	...	...	...	...	1	1 0
Rev. J. H. Du Boulay	...	...	...	...	...	...	...	1	1 0
Downton :—									
John Taunton, Esq.	...	...	...	...	...	...	...	0	10 6
Wm. Taunton, Esq.	...	...	...	...	...	...	...	0	10 6
Mrs. W. Whitchurch	...	...	...	...	...	...	...	0	10 6
Rev. J. T. Collier	...	...	...	...	...	...	...	0	10 6
Salisbury :—									
Rev. R. Swayne	...	...	...	...	...	...	...	1	1 0
J. Keynes, Esq.	...	...	...	...	...	...	...	0	10 6
C. H. Radcliffe, Esq.	...	...	...	...	...	...	...	1	0 0
The Mayor of Salisbury	...	...	...	...	...	...	...	1	1 0
Thomas New, Esq.	...	...	...	...	...	...	...	0	10 6
Rev. G. Short	...	...	...	...	...	...	...	0	10 6
Plymouth :—									
F. Windeatt, Esq.	...	...	...	...	...	...	...	2	2 0
W. F. Tucker, Esq.	...	...	...	...	...	...	...	0	10 6
Rev. T. Coney	...	...	...	...	...	...	...	1	1 0
Rev. W. Sykes	...	...	...	...	...	...	...	1	1 0
Rev. W. C. Bishop	...	...	...	...	...	...	...	1	1 0
H. C. Fox, Esq.	...	...	...	...	...	...	...	0	10 6
Falmouth :—									
Mrs. F. M. Mackenzie...	...	...	...	...	...	...	...	1	1 0
Rev. J. Wright	...	...	...	...	...	...	...	1	1 0
Charles Phillips, Esq.	...	...	...	...	...	...	...	0	10 6
Truro :—									
G. F. Remfry, Esq.	...	...	...	...	...	...	...	1	1 0

# LECTURES.

Bodmin:—									£ s. d.
S. Hicks, Esq....	...	...	...	...	...	...	...	...	0 10 6
J. S. Pethybridge, Esq.	...	...	...	...	...	...	...	...	0 10 6
R. Dave, Esq....	...	...	...	...	...	...	...	...	0 10 6
Liskeard:—									
Rev. J. Glencross	...	...	...	...	...	...	...	...	1 0 0
St. Martin's Lodge of Freemasons	...	...	...	...	...	...	...	...	2 2 0
Christopher Childs, Esq.	...	...	...	...	...	...	...	...	0 10 0
Miss Rees	...	...	...	...	...	...	...	...	0 10 6
Rev. J. O. West	...	...	...	...	...	...	...	...	1 1 0
S. W. Jenkin, Esq.	...	...	...	...	...	...	...	...	0 10 6
W. J. Corin, Esq.	...	...	...	...	...	...	...	...	0 10 6
Torquay:—									
S. Hanbury, Esq.	...	...	...	...	...	...	...	...	1 1 0
Mrs. Mackintosh	...	...	...	...	...	...	...	...	1 1 0
Mrs. McHenry	...	...	...	...	...	...	...	...	1 1 0
Miss M. S. Tyssen-Amhurst	...	...	...	...	...	...	...	...	1 1 0
M. H. V. Mansfield, Esq.	...	...	...	...	...	...	...	...	1 1 0
Rev. W. B. Davis	...	...	...	...	...	...	...	...	0 10 6
Rev. W. G. Smethwick	...	...	...	...	...	...	...	...	0 10 6
Thomas Mayo, Esq.	...	...	...	...	...	...	...	...	0 10 6
Rev. E. Edwards	...	...	...	...	...	...	...	...	1 1 0

## ERRATA.

In the *Quarterly Statement* for October, 1872, the *annual subscription* of Lieut.-Col. M. R. Haig of £3 3s. was erroneously entered as a *donation*.

In the *Quarterly* for Jan., 1873, the following Lectures were omitted:—

Oct. 10, Southampton, collection £5 5s., with promised subscriptions, afterwards paid and acknowledged, also those of the Rev. F. E. Wigram and Mrs. Hutchins.

Also Oct. 11, Bournemouth, collection £12 11s. 2d.

aRev. S. G. Gillam ..... £0 10 0

aRev. F. Hopkins..... 1 0 0

## PUBLICATIONS OF THE SOCIETY.

*Bentley and Son.*

The Recovery of Jerusalem, One Guinea.

Our Work in Palestine, 3s. 6d.

Nos. 1 to 8.—The earlier papers, which have mostly been embodied in subsequent publications, are now out of print, except Captain Warren's Notes on the Valley of the Jordan and Excavations at Ain es Sultan (Jericho).

9—15. Quarterly Statement. Vol. I. Nos. I. to VII.

These Nos. are now all out of print, except 5, 6, and 7, which contain, among other matter—The History of the Moabite Stone—Captain Warren on Lebanon and the Temples of Cœle-Syria—Captain Warren's Journey to East of Jordan—Letters from Mr. E. H. Palmer—Mr. Simpson on the Royal Quarries—Plan of the Haram Area, showing Excavations—&c., &c.

16—19. Quarterly Statement. New Series. Nos. I. to IV., 1871, containing—The Desert of the Tih and the Country of Moab, by Prof. E. H. Palmer, with large map and illustrations—Map of Moab—Captain Warren on the Plain of Philistia—Prof. Palmer on the Lebanon—M. Clermont Ganneau on certain New Discoveries—The Building of the Mosque of Omar, by Prof. E. H. Palmer—Captain Warren's Latitudes and Longitudes—Mr. Hyde Clarke on the Pre-Israelite Inhabitants of Palestine—&c., &c.

Nos. I. and III. are out of print.

20—24. Quarterly Statement for 1872, containing—Papers from Capt. Stewart, Mr. C. F. Tyrwhitt Drake, Lieut. C. R. Conder, Captain Wilson, Captain Warren, Captain Burton, Mr. Glaisher, Mr. Grove, Rev. F. W. Holland, Mr. Dugald Campbell, Mr. Hyde Clarke, Dr. Alexander Buchan, Rev. H. E. Northey, Rev. J. E. Bailey, Mr. George Smith, and Rev. Dunbar Heath.

The January number is out of print.

25—26. Quarterly Statement, for Jan. and April, 1873, containing Progress of the Survey, Discoveries in Jerusalem, &c.

## LOCAL ASSOCIATIONS.

ALLOA : *Hon. Sec.*—Rev. Alexander Bryson.

ABERDEEN : *Hon. Sec.*—Rev. Prof. Milligan, D.D.

ALNWICK : *Hon. Sec.*—Edward Allen, Esq.

ARBROATH : *Hon. Sec.*—W. J. Anderson, Esq.

AYR : *Hon. Sec.*—Robert Murdoch, Esq.

BASINGSTOKE : *Hon. Sec.*—Rev. W. Marriner.

BATH : *Hon. Sec.*—Rev. T. P. Methuen.

BEDFORD : *Hon. Sec.*—Rev. Canon Haddock.

BIRKENHEAD : *Hon. Secs.*—Rev. J. T. Kingsmill and T. Bell, Esq., St. Aidan's College.

BIRMINGHAM : *Hon. Sec.*—

## LOCAL ASSOCIATIONS.

- BLACKBURN : *Hon. Secs.*—Rev. Canon Birch and Rev. A. B. Grosart.  
 BODMIN.—See *supra*, p. 3.  
 BOTHWELL.—Through the “Bible Society” of the town.  
 BOURNEMOUTH : *Hon. Sec.*—Rev. Dr. Edersheim.  
 BRADFORD : *Hon. Sec.*—Rev. W. Dyson.  
 BRIGHTON : *Hon. Sec.*—Rev. C. E. Douglass.  
 BROADSTAIRS : *Hon. Sec.*—Rev. J. H. Carr.  
 BROMLEY : *Hon. Sec.*—Rev. W. J. Devereux.  
 BURNLEY : *Hon. Sec.*—Rev. H. A. Crosbie.  
 BURY : *Hon. Treas.*—Rev. Canon J. Hornby ; *Hon. Sec.*—Rev. W. Thorburn.  
 CALLINGTON : *Hon. Sec.*—Rev. F. V. Thornton.  
 CAMBRIDGE : *Hon. Sec.*—Rev. T. G. Bonney, Tutor of St. John’s College.  
 CANADA : Toronto.—Subscriptions are kindly received by the Hon. G. W. Allan.  
 CARDIFF : *Hon. Sec.*—  
 CHELMSFORD : *Hon. Sec.*—H. S. Coleman, Esq.  
 CHELTENHAM : *Hon. Sec.*—Dr. E. Wilson.  
 CHESTER : *Hon. Sec.*—The Very Rev. the Dean of Chester.  
 CHIGWELL : *Hon. Sec.*—Rev. H. M. Robinson.  
 CHIPPENHAM : *Hon. Sec.*—A. T. Keary, Esq.  
 CLIFTON and BRISTOL : *Hon. Secs.*—Rev. C. H. Wallace and Rev. J. B. Goldberg.  
 COUPAR ANGUS : *President*—Very Rev. Dean Torry.  
 CROYDON : *Hon. Sec.*—Mr. Warren.  
 DARLINGTON : *Hon. Sec.*—J. P. Pritchett, Esq.  
 DEVIZES : *Hon. Sec.*—Rev. W. P. S. Bingham.  
 DEVONPORT : *Hon. Sec.*—J. Venning, Esq.  
 DORCHESTER : *Hon. Sec.*—Rev. Handley Moule.  
 DOVER : *Hon. Sec.*—Mr. W. P. Mummery.  
 DUNDEE : *Hon. Sec.*—R. Mackenzie, Esq.  
 DURHAM : *Hon. Sec.*—Rev. J. Dodd.  
 DUNFERMLINE : *Hon. Sec.*—Rev. And. Brydie.  
 EASTBOURNE : *Hon. Sec.*—Rev. H. R. Whelpton.  
 EDINBURGH : *Hon. Secs.*—Rev. W. Lindsay Alexander, D.D., and T. B. Johnston, Esq., F.R.G.S., 4, St. Andrew Square.  
 EXETER : *Hon. Sec.*—Rev. Prebendary Acland, Broad Clyst.  
 FALMOUTH, for the County of Cornwall : *Hon. Secs.*—A. Lloyd Fox and W. P. Dymond, Esq.  
 FAVERSHAM : *Hon. Sec.*—Charles Smith, Esq.  
 FORFAR : *Hon. Sec.*—T. Wilkie, Esq.  
 FROME : *Hon. Sec.*—Rev. T. G. Rooke.  
 FOLKESTONE : *Hon. Sec.*—  
 GLASGOW : *Hon. Secs.*—Rev. W. Dickson, D.D., Rev. Donald Macleod, D.D., and A. B. M’Grigor, Esq.  
 GLOUCESTER : *Hon. Secs.*—Rev. J. Bowman and F. Cooke, Esq.  
 GREENOCK : *Hon. Sec.*—D. MacDonald, Esq.  
 GUILDFORD : *Hon. Sec.*—Capt. Campbell, R.N.  
 HALIFAX : *Hon. Sec.*—J. H. Bracken, Esq.  
 HALSTEAD : *Hon. Secs.*—Rev. S. J. Eales and Rev. J. W. Coombes.  
 HASTINGS : *Hon. Sec.*—  
 HELENSBURG : *Hon. Sec.*—Rev. A. Murray McCallum.  
 HERTFORD : *Hon. Sec.*—W. M. Armstrong, Esq.



# LOCAL ASSOCIATIONS.

- HEXHAM : *Hon. Sec.*—John Hope, Esq., jun.  
 HITCHIN : *Hon. Sec.*—David Lloyd, Esq.  
 HUDDERSFIELD : *Hon. Sec.*—Henry Barker, Esq., Railway St., St. George's Sq.  
 HULL : *Hon. Sec.*—Dr. Bell.  
 HUNTINGDON : *Hon. Sec.*—Rev. Gerald Vesey.  
 INVERNESS : *Hon. Sec.*—Capt. Bolland, R. F.  
 IPSWICH : *Hon. Sec.*—Rev. J. R. Turnock.  
 IRVINE : *Hon. Sec.*—Adam Sutherland, Esq.  
 KIRKALDY : *Hon. Sec.*—John Barnett, Esq.  
 LEEDS : *Hon. Sec.*—Edward Atkinson, Esq.  
 LEITH : *Hon. Sec.*—A. Davies, Esq.  
 LEWES : *Hon. Sec.*—Rev. R. Straffen.  
 LISKEARD : *Hon. Sec.*—W. J. Corin, Esq.  
 LIVERPOOL : *Hon. Sec.*—Rev. W. R. Blackett, 65, Bedford-street.  
 MALVERN : *Hon. Sec.*—Rev. D. F. A. Grahame.  
 MANCHESTER : *Hon. Sec.*—Rev. Canon Crane.  
 MANSFIELD : *Hon. Sec.*—T. W. Clarke, Esq.  
 MARCH : *Hon. Sec.*—Rev. J. Cater.  
 MARGATE : *Hon. Sec.*—Rev. G. Collis.  
 MARKET HARBOROUGH : *Hon. Sec.*—Joseph Nunnally, Esq.  
 MIDDLESBOROUGH : *Hon. Sec.*—Rev. Edmund Jackson.  
 MONTROSE : *Hon. Sec.*—Mr. Mackie.  
 NEWARK : *Hon. Sec.*—Evelyn Falkner, Esq.  
 NEWARK : Ladies' Committee. *Hon. Treas.*—Mrs. Tallents; *Hon. Sec.*—Mrs. G. Hodgkinson.  
 NEWCASTLE : *Hon. Treasurer.*—Thomas Hodgkin, Esq.; *Hon. Sec.*—W. Lyall, Esq.  
 NEWPORT PAGNELL : *Hon. Sec.*—F. Tayler, Esq.  
 NORTHAMPTON : *Hon. Sec.*—H. Marshall, Esq.  
 OLNEY : *Hon. Sec.*—W. Hipwell, Esq.  
 OXFORD : *Hon. Sec.*—Rev. Edwin Hatch.  
 PAISLEY : *Hon. Sec.*—Rev. J. Dods.  
 PERTH : *Hon. Sec.*—John W. Jameson, Esq.  
 PLYMOUTH : *Hon. Secs.*—J. B. Rowe, Esq., and J. Shelly, Esq.  
 PORTSMOUTH : *Hon. Sec.*—  
 READING : *Hon. Sec.*—Rev. T. H. Armstrong.  
 REIGATE and REDHILL : *Hon. Sec.*—W. Wilson Saunders, Esq.  
 RICHMOND, SURREY : *Hon. Sec.*—R. R. Alexander, Esq.  
 SCARBOROUGH : *Hon. Sec.*—Rev. J. Bedford.  
 SEVENOAKS : *Hon. Sec.*—Graham Jackson, Esq.  
 SOUTHPORT : *Hon. Sec.*—George Lee, Esq.  
 SHERBORNE : *Hon. Sec.*—J. Farmer, Esq.  
 SOWERBY : *Hon. Sec.*—Rev. A. L. W. Bean.  
 ST. ALBANS : *Hon. Sec.*—Rev. W. J. Lawrance.  
 ST. ANDREW'S : *Hon. Secs.*—Dr. Lees and Dr. Mitchell.  
 ST. GERMANS : *Hon. Sec.*—R. Kerswill, Esq.  
 STALYBRIDGE : *Hon. Sec.*—Rev. Dr. Cranswick.  
 STOCKTON : *Hon. Sec.*—Joseph Laidler, Esq., M.D.  
 STIRLING : *Hon. Sec.*—Rev. W. Taylor.  
 STROUD : *Hon. Sec.*—T. S. Osborne, Esq.

## LOCAL ASSOCIATIONS.

TAUNTON : *Hon. Sec.*—R. J. Shepherd, Esq.  
TAVISTOCK : *Hon. Sec.*—Mr. Frederick Clarke.  
TIVERTON : *Hon. Sec.*—John Allen, Esq.  
TORQUAY : *Hon. Sec.*—Rev. G. E. Phillips.  
TUNBRIDGE WELLS : *Hon. Sec.*—Capt. Palmer, R.E.  
WARMINSTER : *Hon. Sec.*—W. Frank Morgan, Esq.  
WELLS : *Hon. Sec.*—W. I. Welsh, Esq.  
WESTON-SUPER-MARE : *Hon. Secs.*—Capt. T. Townsend, R.E., and J. Titley, Esq.  
WHITBY : *Hon. Sec.*—E. W. Chapman, Esq.  
WHITEHAVEN : *Hon. Sec.*—  
WILLESDEN : *Hon. Sec.*—Rev. J. Crane Wharton.  
WINCHESTER : *Hon. Sec.*—Miss Zornlin.  
WINDSOR : *Hon. Sec.*—Rev. H. Courtenay Hawtrey.  
WORCESTER : *Hon. Sec.*—Rev. Francis J. Eld.  
YARMOUTH : *Hon. Sec.*—Rev. H. R. Nevill.

---

## PHOTOGRAPHS.

*Agent.*—Mr. Stanford, 6, Charing Cross.

Price, 1s. 6d. each. To Annual Subscribers of 10s. 6d. and upwards, 1s. cash.

The new list will be ready shortly, and will be issued with the next *Quarterly*.  
For the new conditions of sale, see the Preface, p. 42.

---

## THE "SEAL OF HAGGAI."

Casts of this small seal have been taken. Their price is 2s. 6d. each.

---

## THE MOABITE STONE.

Facsimile casts of the small fragments have been taken. They can be procured at cost price.

Photographs (to be obtained of Mr. Edward Stanford, 6, Charing Cross)—

1. One-third size of Captain Warren's tracings (mounted)... £0 3 6
  2. Full size of the squeezes themselves, in four photographs... 2 10 0
-

## TREASURER'S STATEMENT.

THE balance-sheet of the year 1872 represents a home expenditure about the same as that of last year. The printing and lithographing expenses are less, the postage and other expenses remain about the same. On the other hand, the Exploration account shows £2,337 9s. 8d. against £1,271 14s. 4d. of the year 1871; while the sum of £425 repaid by Captain Stewart on his resigning the work of the Fund must be still further deducted from the Exploration account of 1871. The donations and subscriptions show an increase of more than £600 on the previous year, while the proceeds of lectures show an increase of £100.

The "Recovery of Jerusalem" has been superseded by the new book, "Our Work in Palestine." None of the proceeds of the book up to December 31 appear in the balance-sheet, while the expenses of its production do not appear in the unpaid accounts. As we stand at present (March 26, 1873), the sum of £105 1s. 8d. has been received by the sale of books at lectures and from the office, including an edition sent to New York. This does not include the large sale from the publishers, Messrs. Bentley and Son. Altogether, close upon 5,000 have been sold, and the new edition is in the press. Against this must be set the cost of production. But the book has now paid all expenses, and the future sale will be a steady source of profit to the Fund.

W. MORRISON, *Hon. Treas.*

Dr.

## BALANCE SHEET, DECEMBER, 1872.

Cr.

1872.	£	s.	d.	1872.	£	s.	d.
Jan. 1.	To Balance	.....	£466 3 1	Dec. 31.	By Exploration Account.....		2337 9 8
"	Less sundry unpaid Accounts.	337 12 6		"	Management, viz.—		
"	Donations and Subscriptions	.....		"	Rent	£90 0 0	
"	Publications, Sale of.....			"	Salaries, &c.	248 3 0	
"	Returned to Bank from Captain Stewart's account	.....		"	Printing.....	202 1 3	
"	Lectures, Proceeds of	.....		"	Lithographing, &c.	79 5 10	
"	Photographs: balance of cost of Stock in hand	.....		"	Advertising	82 9 1	
"	Sundry unpaid Accounts.....			"	Stationery, &c.	31 7 6	
					Sundries	29 9 5	
				"	Postage	.....	762 16 1
				"	Photographs: balance of cost of Stock in hand	.....	92 1 10
					Balance.....		109 15 11
							3302 3 6
							670 5 9
							£3972 9 3

Examined and found correct,

(Signed)

W. MORRISON, Hon. Treasurer

Palestine Exploration Fund.

# LIST OF SUBSCRIPTIONS.

MARCH 25TH TO JUNE 30TH, 1873.

*a* denotes Annual Subscriber.

\* \* If any omission or mistake be observed in the following lists, the Secretary will be glad to be informed of it, and will rectify the error in the next *Quarterly Statement*.

## SPECIAL JERUSALEM FUND.

Amount already advertised in April *Quarterly* ..... £57 11 0  
Prov. Grand Lodge N. and E. Ridings, Yorkshire ..... 1 1 0

## SURVEY AND GENERAL PURPOSES.

	£	s.	d.		£	s.	d.
Miss Baxter, of Ellangowan ...	25	0	0	a W. Clark, Esq. ....	1	1	0
Rt. Hon. Stephen Cave, M.P. ....	25	0	0	a Mrs. Goddard ..... 0	10	0	0
H. A. Harper, Esq. ....	30	0	0	a H. S. Patteson, Esq. ....	1	1	0
C. W. Jones, Esq. ....	10	10	0	a J. Moody, Esq. ....	0	10	6
a Lord Alfred Churchill ....	5	0	0	a W. Shaw, Esq. ....	1	1	0
Sir Moses Montefiore .....	3	3	0	“Island of Arran” .....	0	2	6
Julian Goldsmid, Esq., M.P. ....	5	5	0	Hyde Clarke, Esq. ....	1	1	0
Jas. Bateman, Esq. ( <i>a</i> for 1872) .....	5	0	0	J. D. Thomas, Esq. ....	0	2	6
Major Wilson, R.E. ....	5	0	0	a G. C. Ashmead, Esq. ....	0	10	6
A. Whitelaw, Esq. ....	5	0	0	a Rev. R. U. Todd .....	0	10	6
G. M. Hicks, Esq. ....	5	5	0	Miss Gill .....	0	10	6
Hastings N. Middleton, Esq. (£1 1s. <i>a</i> ) .....	5	5	0	a Rev. T. B. Paget .....	2	2	0
a C. F. Fellows, Esq. ....	5	0	0	Rev. A. Christopherson—			
Henry Charlewood, Esq. ....	5	0	0	£1 1 0 for 1872 .....	4	4	0
R. D. Wilson, Esq. ....	5	0	0	1 1 0 for 1873 .....			
Dr. Hutchinson (£1 1s. <i>a</i> ) .....	5	5	0	2 2 0 for Survey .....			
F. R. Buchanan, Esq. ....	5	0	0	a A. W. Hume, Esq. ....	1	1	0
Collected at Geithorn Kirk ...	3	15	0	a Bishop of Fredericton .....	1	1	0
Miss Stephens .....	0	10	0	a Miss Barlow .....	2	2	0
Proceeds of two lectures given by Captain Warren .....	4	0	0	J. A. Cooper, Esq. ....	1	1	0
a C. J. Lacy, Esq. ....	0	10	6	a Rev. A. M. Rendell .....	1	1	0
a Colonel Puget (2nd don) .....	2	0	0	a J. S. Aldis, Esq. ....	1	1	0
a Louis Buxton, Esq. ....	1	0	0	a James L. Moore, Esq. ....	1	1	0
a Lieut. Jelinger Symons, R.N. .	0	10	6	a W. Philips, Esq. ....	1	1	0
a Rev. R. H. Codrington .....	1	1	0	Miss Hislop .....	0	5	0
a J. Fennell, Esq. ....	1	0	0	Rev. J. Gamble .....	0	10	6
a Rev. M. T. Farrer .....	1	0	0	Rev. W. F. Clarkson .....	0	5	0
a Rev. H. O. Sterland .....	0	10	0	a Mrs. Eyre .....	1	1	0
a Rev. Cator Chamberlaine .....	2	2	0	a Robert Lord, Esq. ....	0	10	6
				a E. C. Stockton, Esq. ....	1	1	0
				a J. Spencer, Esq. ....	0	10	6
				a W. Windley, Esq. ....	2	2	0



# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
aRev. J. Kenrick .....	1	1	0	aMiss Deacon .....	0	5	0
aW. Martin Southwell, Esq. ...	1	1	0	aRev. H. Cross .....	0	10	6
aE. Akroyd, Esq., M.P. ....	1	1	0	aMrs. Harrison .....	1	1	0
aMiss Williams .....	1	1	0	aJ. Jarrold, Esq. ....	1	1	0
aJ. Morris, Esq. ....	1	1	0	aRev. E. M. McConkey .....	1	1	0
P. Vernon Smith, Esq. ....	3	0	0	McCready .....			
aG. I. Smith, Esq. ....	1	1	0	aRichard Mullings, Esq. ....	1	1	0
aDr. Duffield .....	0	10	6	aA. J. Sloper, Esq. ....	0	5	0
aA. Carson, Esq. ....	1	1	0	aGeneral Gascoyne .....	1	1	0
E. Fry, Esq. (a1 1 0)....	2	2	0	aJ. Turnbull, Esq. ....	1	1	0
aMiss Fisher .....	1	1	0	aMrs. Newcomb .....	1	1	0
aRev. A. A. Isaacs .....	0	10	0	aW. D. Pritchett, Esq. ....	0	10	6
aG. F. White, Esq. ....	1	1	0	Ditto for 1874.....	0	10	6
aG. F. Pritt, Esq. ....	1	1	0	aRev. T. Harding.....	1	1	0
aW. D. Jarrold, Esq. ....	1	1	0	aMiss Garnet .....	0	10	6
aMrs. Jackson .....	0	10	0	aRev. F. Baldey .....	1	1	0
aWalter Peppercorn, Esq. ....	0	10	6	aJohn Carr, Esq. ....	1	1	0
aRev. H. Collis .....	0	10	6	aMiss Clayton .....	0	10	0
aJames Bowson, Esq. ....	1	1	0	aRowland Winn, Esq., M.P. ...	1	1	0
Rev. Thomas Ladds .....	1	1	0	aJ. J. Kent, Esq. ....	2	2	0
aThomas Dobson, Esq. ....	1	1	0	aRev. G. J. Chester .....	0	10	6
Miss Laura Relton, Collected by	0	7	6	aRev. John Winter .....	0	10	6
aRev. W. H. Bathurst.....	2	0	0	aC. M. G. ....	1	1	0
aC. H. Millar, Esq. ....	2	2	0	aJohn Slessor, Esq. ....	1	1	0
aEdward Millar, Esq. ....	2	2	0	"Semper idem." .....	0	10	0
aRev. W. Bruce .....	0	10	6	aMrs. Guise .....	1	0	0
aF. Lambert, Esq. ....	1	1	0	J. Cock, Esq., jun. (2nd don.)	0	5	0
F. K. ....	1	1	0	aMessrs. T. Cook and Sons .....	1	1	0
aH. Wiglesworth, Esq. ....	0	10	6	Mrs. Newman Smith (£1 1s. a)	3	3	0
aVaudrey Lush, Esq., M.D. ...	1	1	0	aMrs. Straight .....	0	10	0
aMrs. Childe .....	0	10	6	aT. Turner, Esq. ....	2	2	0
aMrs. Hampton .....	1	1	0	aJ. W. Kitchen, Esq. ....	1	1	0
aDavid Young, Esq. ....	0	10	6	aRev. T. Troughton .....	2	2	0
aJ. L. Laidler, Esq. ....	1	1	0	Collected by W. Appleford, Esq.	1	0	9
aH. MacLauchlin, Esq. ....	0	10	6	aMiss Chambers .....	1	1	0
Miss M. Hill .....	0	10	0	aRev. C. G. Chittenden .....	1	0	0
C. M. Caldecott, Esq. ....	2	2	0	aR. J. Webb, Esq. ....	1	1	0
aRev. W. J. Geldart, LL.M. ...	0	10	6				

## LOCAL SOCIETIES.

### AYR.

May 1.—By cash .....£6 14 6

Aytoun, Miss, Sunnyside, Ayr .	£0	10	0	McMurtrie, James, Esq., Bank			
Cowan, Hugh, Esq., St. Leonard's, Ayr .....	0	5	0	of Scotland, Ayr .....	£0	5	0
Currie, D., Esq., Barns Street, Ayr .....	0	5	0	McNeille, Mrs., Blackburn			
Douglas, Campbell, Esq., 266, St. Vincent Street, Glasgow .	0	10	6	Villa, Ayr .....	0	5	0
Dykes, Rev. Dr., The Manse, Ayr .....	0	10	6	McTaggart, Miss, Seafield			
Flint, John, Esq., Ayr.....	0	10	6	House, Ayr .....	1	0	0
Lennox, General, Ayr .....	0	10	6	Murdoch, John, Esq., C.E., Ayr	0	10	6
				Murdoch, J. F., Esq., Fairfield			
				Lodge, Ayr.....	0	10	6
				Murdoch, R. D., Esq., Fairfield			
				Lodge, Ayr.....	1	1	0

# LIST OF SUBSCRIPTIONS.

## BATH.

April 15.—Miss Batchellor .....	£1 0 0
„ —C. Timins, Esq. ....	0 5 0
June 30.—By cash .....	16 7 0

The Miss Goldies .....	£1 0 0	Mrs. Carr .....	£0 10 0
Rev. C. Kemble .....	0 10 0	Rev. J. Wood .....	0 10 0
Miss F. Hickes .....	2 0 0	E. T. Caulfield, Esq. ....	0 10 0
Rev. J. Lawes .....	0 10 0	Rev. Hay S. Escott .....	0 5 0
W. J. Church, Esq. ....	1 1 0	Miss Batchellor .....	1 1 0
Rev. W. Stokes Shaw .....	0 10 0	Mrs. Mount .....	1 1 0
Rev. J. F. Moor .....	0 10 0	Miss A. Smith .....	0 5 0
Mrs. Moor .....	0 10 0	R. T. Gore, Esq. ....	0 10 0
Rev. J. Bond.....	0 10 0	Miss Churton.....	1 1 0
Rev. H. H. Winwood .....	1 1 0	Rev. G. E. Tate.....	1 1 0
C. Timins, Esq.....	0 5 0	Rev. T. P. Methuen.....	1 1 0
W. Daubeny, Esq. ....	0 5 0		
			£16 7 0

## BOLTON.

αMay 6.—Robert Lord, Esq. ....	£0 10 6
--------------------------------	---------

## BRADFORD.

March 27.—R. A. J. Holme .....	£1 1 0
April 23.—By cash .....	8 3 3
May 16.—By cash.....	1 11 6

<i>Receipts.</i>		<i>Payments.</i>	
αRev. G. Harrison.....	£0 10 6	Printing and advertising, as per	
αRev. T. W. Northmore .....	1 1 0	receipted books .....	£2 15 9
αRev. E. Mercer .....	0 10 6	Hire of room for meeting.....	1 10 0
αR. Barr, Esq. ....	0 2 6	By balance.....	9 14 9
Alfred Loftus, Esq.....	0 5 0		
αMiss Lambert .....	0 10 6		
αW. Milnes, Esq.....	0 5 0		
αRev. R. W. Loosemore .....	0 10 6		
αRev. J. H. Flynn .....	0 10 6		
αRev. W. Edwards .....	0 5 0		
αRev. C. Dyson .....	0 10 0		
For 1872 :—			
Rev. C. Edwards.....	0 5 0		
G. Tindle, Esq. ....	2 2 0		
G. Turner, Esq. ....	2 2 0		
Proceeds of Lectures by Rev.			
B. Alford, Feb. 1871 .....	3 10 0		
	£14 0 6		£14 0 6

## BURY.

March 26.—By cash.....	£3 0 0
------------------------	--------

# LIST OF SUBSCRIPTIONS.

## BRIGHTON.

June 23.—By cash ..... £3 4 6

*Amount to June 21, 1873.*

H. Soames, Esq., Tramore Lodge, 7, Park-road East, Brighton...	£1 0 0	Collector's Commission and other Expenses .....	£0 7 6
C. Bellingham, Esq., 12, New Steine, Brighton .....	0 10 0	Transmitted June 21st, 1873, by Local Hon. Sec. for Brighton, Rev. C. E. Douglass.....	3 4 6
The Rev. Dr. Hannah, Vicarage, Brighton.....	1 1 0		
Rev. C. E. Douglass, 14, Clifton- terrace, Brighton .....	1 1 0		
	£3 12 0		£3 12 0

## CARDIFF.

April 15.—By Cash ..... £1 11 0

Mr. Billups ..... £1 1 0 | Captain Johnson ..... £0 10 0

## CLIFTON.

May 8.—Proceeds of meeting ..... £14 8 0

## DARLINGTON.

June 2.—*a*W. Cudworth, Esq. .... £1 0 0  
 June 3.—By Cash..... 11 5 6  
 June 6.—*a*H. F. Pease, Esq. .... 5 0 0

The following names are added to the Darlington list :—

<i>a</i> R. Teesdale, Esq. ....	£1 1 0	<i>a</i> J. Hildyard, Esq. ....	£0 10 6
<i>a</i> W. Thompson, Esq. ....	1 1 0	Mr. J. Deighton .....	0 2 6
<i>a</i> J. Wadham, Esq. ....	0 10 6		

## DURHAM.

April 26.—*a*T. S. Aldis, Esq. .... £1 1 0

## EXETER.

June 2.—By Cash..... £9 14 0

1873.		1873.	
Miss White .....	£0 10 6	May 30.—Remitted by Cheque	£9 14 0
Bishop of Exeter .....	5 0 0		
Mrs. A. Mills.....	1 1 0		
Rev. Canon Cook .....	1 1 0		
Mrs. Arden .....	1 1 0		
Rev. P. L. D. Acland .....	1 1 0		
	£9 14 0		£9 14 0

# LIST OF SUBSCRIPTIONS.

## FROME.

April 13.—By cash ..... £11 9 0

Contributions from Frome, April, 1873, per Rev. T. G. Rooke :—			J. Tanner, jun., Esq. ....	£1 1 0
Mr. Jos. Chapman .....	£0 2 6		W. Thompson, Esq., and family.....	0 15 6
Rev. A. Daniel .....	0 10 6		Collected by E. C. Olive, Esq. :—	
E. Flatman, Esq. ....	0 10 6		E. Cockey, Esq. ....	0 2 6
T. Green, Esq. ....	1 1 0		H. Cockey, Esq. ....	0 5 0
T. H. Holroyd, Esq. ....	1 1 0		Rev. W. Crouch .....	0 5 0
H. Houston, Esq. ....	0 10 6		G. A. Daniel, Esq. ....	0 5 0
P. LeGros, Esq. ....	0 10 6		Rev. J. Horton.....	0 5 0
Rev. T. G. Rooke .....	1 1 0		E. C. Olive, Esq. ....	0 10 6
Miss Sewell .....	0 10 6		C. L. Robertson, Esq.....	0 10 6
Mrs. Jno. Sheppard .....	0 10 6		T. W. D. Wickham, Esq. ....	0 10 6
Jos. Tanner, Esq.....	0 10 0			

## GLASGOW.

April 2.—P. Mackinnon, Esq. .... £10 0 0

## GREENOCK.

May 30.—aMessrs. J. J. and Horatius Bonar..... £2 2 0  
June 20.—Rev. J. J. Bonar..... 1 0 0

The collection of £5 10s. from the scholars of the St. Andrew's Free Church Sabbath School, entered in last *Quarterly's* general list, should have been entered under the head of the Greenock Local Association.

## HALIFAX.

June 10.—By cash..... £2 6 6

Malcolm Bowman, Esq., George Street, Halifax .....	£0 10 6	John Hirst, Esq., West Parade, Halifax .....	£0 10 6
Mrs. Brown, Barden Grange, Westwood, Leeds .....	0 15 0	Miss G. Hirst, The Dene, near Halifax .....	0 10 6

## HULL.

May 6.—By cash.....£20 16 6

The following circular has been issued :—

Chairman—J. E. Wade, Woodhall.  
Hon. Secretaries—Rev. E. Jackson, M.A. ; J. P. Bell, M.D.  
Hon. Treasurer—W. Sissons, Park Street.

We beg to invite your attention to the above Fund. The work of the Society is maintained by means of subscriptions, donations, proceeds of lectures, and by the sale of publications and photographs.

Annual Subscribers of 10s. 6d. and upwards are entitled (post free) to the *Quarterly Statement of Progress*.

# LIST OF SUBSCRIPTIONS.

Of the importance and interesting nature of the investigation it is needless for us to speak.

May we ask if you will kindly aid us in carrying on this work?

We are, yours truly,  
E. Jackson, Holy Trinity, Hull, }  
J. P. Bell, Waverley House, Hull, } Hon. Secs.

J. Pearson Bell, M.D., Waverley House	£1 1 0	George Myers, 71, Coltman-st. .	£0 10 6
Rev. J. Byron, M. A., Killingholme Vicarage, Ulceby, Lincolnshire	0 10 6	Rev. L. B. Brown, 7, Wright-street	0 2 6
Theophilus Carrick, 14, Jarratt-street	1 1 0	J. E. Wade, Woodhall.	1 1 0
E. J. Cook, Park-street	1 10 6	W. J. Lunn, M.D., Charlotte-street	0 10 6
Rev. J. Ellam, the Vicarage, Drypool	0 10 6	Mrs. Wilson	0 5 0
Colonel Francis, R.E., Bank of England, Old Burlington-st., London	1 1 0	Rev. W. T. Vernon, M.A., Kirkella	0 10 6
Rev. F. F. Goe, M.A., 27, Albion-st., remitted to London	1 1 0	Anthony Owst Atkinson, L.L.D., Clare House	0 10 6
J. H. Hill, 7, Parliament-street	0 5 0	Messrs. Stuart and Gregson, 22, High-street	1 1 0
J. F. Holden, Land-of-Green-Ginger	0 5 0	W. Bethell, jun.	
Rev. E. Jackson, M.A., Eston, near Middlesbro'	1 1 0	Rev. Canon Musgrave, M.A., Etton, near Beverley	1 1 0
William Jameson, 30, Albion-st.	1 1 0	Captain Thompson, 7, Pryme-street	1 1 0
William Leatham, Anlaby-road	1 1 0	Miss E. Bromby, 13, Charlotte-street	0 10 6
Rev. Dr. Mackay, Spring Bank	0 10 6	A Friend	
James Pyburn, M.D., Prospect-street	1 1 0	Captain Thompson, 1872	1 1 0
Miss E. Radford, Hessle	0 10 6	A. O. Atkinson, 1872	0 10 6
William Sissons, 92, Park-street	1 1 0	W. J. Lum, 1872	0 10 6
Henry Soulby, M.D., Waverley House	0 10 6	Canon Musgrave, 1872	1 1 0
		Printing, postages, &c. ...	£23 4 0
			2 7 6
			20 16 6

## INVERNESS.

May 5.—a Neil Macdonald, Esq. ....£1 1 0  
April 8.—By cash ..... 8 19 0

J. D. Lamb, Esq.	£1 1 0	Dr. Vass	£0 10 6
Andrew Dougall	1 1 0	The Bishop of Moray and Ross, primus	1 1 0
F. Wallace	0 10 6	Dr. Mackenzie, provost	1 1 0
C. Fraser Mackintosh	2 2 0	Captain Bolland, R.E.	1 1 0
Rev. D. Webster	0 11 0		

## IRVINE.

May 30.—By cash .....£7 11 0

Being the following, less 2s. for expenses :—

George Brown, Esq., of Burnside, Irvine	£2 0 0	W. Christie, Esq., solicitor, Irvine	£0 10 6
Alexander Gilmour, Esq., of Amfield, Irvine	1 1 0	John Paterson, Esq., banker, Irvine	0 10 6
Miss Macfie (1 don.), Irvine	1 0 0	Mrs. J. C. Brown, Georgeville, Irvine	0 10 0



# LIST OF SUBSCRIPTIONS.

J. Wright, tertius.....	£0	2	6	Rev. J. Gregor .....	£0	2	6
Robert Brown .....	0	1	6	Rev. J. F. Jaffrey .....	1	0	0
Miss Thomson .....	0	5	0	Andrew Watt.....	0	1	6
J. K. Ferguson .....	0	1	0	John Wright, agent .....	0	2	6
James Gilkieson .....	0	2	6	A. Sutherland.....	0	2	0

## LEITH.

The following is the Committee lately formed in Leith :—

Provost Watt, <i>President</i> .	Mr. J. Walker.
Rev. Dr. Smith.	Mr. D. W. Henderson.
Rev. Dr. Harper.	Mr. T. Sturrock.
Rev. D. Thorburn.	James Currel.
Rev. W. J. Cox.	W. Warrick.
Mr. John K. Wishart.	Robert Laurie.
Mr. John Warrack.	G. Macfarlane.

Secretary—Mr. W. A. Davies, 4, East Hermitage Place.  
Treasurer—Mr. J. Braidwood, 1, Sandport Street.

## MANCHESTER.

Names forwarded by Rev. W. F. Birch.

aJames Barlow, Esq. ....	£1	1	0	John Nickson, Esq. ....	£2	2	0
aG. Ganthorp, Esq. ....	0	10	6	aW. Gough, Esq. ....	1	1	0
aMessrs. Hannay and Dickson..	1	0	0	J. H. Shorthouse, Esq. (£1 1s. a)	2	2	0
R. Curtis, Esq. ....	1	1	0	aHenry Lowe, Esq. ....	1	1	0
aThomas Jones, Esq. ....	0	10	6	aJ. Robinson, Esq. ....	2	2	0
aWalter Bellhouse, Esq. ....	1	1	0	aMrs. J. Shelton .....	0	10	6
aMessrs. J. C. Harter and Co....	1	1	0				

## MANSFIELD.

June 27.—By cash .....	£2	12	0
Mrs. Gillott .....	0	10	0
J. Paget, Esq. ....	1	1	0
Mrs. Paget.....	1	1	0

## NEWARK.

May 29.—Mrs. Sikes .....	£1	1	0
--------------------------	----	---	---

## NEWCASTLE.

May 16.—aLiterary and Philo. Society .....	£3	3	0
--	----	---	---

## NEW BRUNSWICK.

June 13.—By cash .....				£3 16 0
Rev. Dr. Nichols, Nova Scotia	Dols.	5'00	Mrs. Parker, New Brunswick .	Dols. 1'00
Bishop of Nova Scotia .....		5'00	Miss Parker, New Brunswick .	1'00
Mrs. Jack, New Brunswick ...		1.00	By sale of Photos. ....	5'50

# LIST OF SUBSCRIPTIONS.

## NORWICH.

The Committee would be very glad to hear from any gentleman willing to act as their hon. sec. for this city.

May 29.—aJ. Jarrold, Esq. .... £1 1 0

## NOTTINGHAM.

May 10.—aW. Windley, Esq. .... £2 2 0

## PAISLEY.

May 6.—R. Kerr, Esq. .... £1 1 0

May 16.—W. Wotherspoon, Esq. .... 1 0 0

## PERTH.

June 28.—By cash ..... £3 0 0

Rev. W. Brown (Dec., 1872).....	£1 0 0	William Belford .....	£0 10 0
Ditto, this date .....	1 0 0	J. W. Tamneson .....	0 10 0

## PLYMOUTH.

June 9.—aH. S. B. Wodehouse, Esq. .... £1 1 0

Collected by H. S. B. Wodehouse, Esq. .... 1 18 0

*Erratum.*—Omitted from Plymouth return of February 27th:—  
aDr. Prance ..... £0 10 6

### Mr. Wodehouse's List:—

Miss Haddy .....	£0 1 0	Mr. W. King.....	£0 1 0
Mr. G. H. Evens .....	0 2 0	Mr. R. W. Lethbridge .....	0 1 0
Mr. J. Carkeet .....	0 2 6	Mr. Thomas Pitts, jun. ....	0 5 0
Mr. W. Angear .....	0 2 6	Mr. J. H. Carne .....	0 1 0
Mr. S. U. Serpell .....	0 2 6	Mr. George Harris .....	0 1 0
Mr. James Tucker .....	0 3 0	Mr. W. Babb.....	0 2 6
Mr. F. Clemow .....	0 1 0	Mr. J. H. Anstis .....	0 2 0
Messrs. G. W. and T. B. ....	0 1 0	Mr. W. R. Congdon .....	0 1 0
Rev. H. A. Greaves .....	0 5 0	Mr. T. R. A. Briggs .....	0 1 0
Mr. J. C. Dyer .....	0 2 0	Mr. H. M. Nicholson .....	0 2 6
Ditto for <i>Quarterly</i> .....	0 0 6	Miss L. Hutchens.....	0 2 6
Mr. Thomas Mitchell .....	0 2 6	Mr. William T. Hutchens .....	0 2 6
Rev. W. Oxland .....	0 2 6	Mr. Thomas Hele .....	0 2 0
Mr. Henry Evers .....	0 5 0	Mrs. H. A. Woodhouse .....	0 5 0
Mr. H. A. Woodhouse .....	0 5 0		
Mr. Thomas Goard .....	0 5 0		
Mr. J. Marshall .....	0 5 0		
		Total .....	£3 18 0

aMr. W. C. Nicholson ..... £0 10 6

## ST. GERMANS.

June 17.—aR. Kerswill, Esq. .... £1 1 0

„ aRev. A. Furneaux ..... 1 1 0

# LIST OF SUBSCRIPTIONS.

## SOUTHBOROUGH.

The Subscriptions (entered under the heading of Tunbridge), of last Quarter should be :—

aColonel Cantis .....	£0 10 0
aColonel Hebbert.....	1 0 0

## STIRLING.

May 9.—By cash ..... £10 8 5

Stirling Local Branch of Palestine Exploration Fund.—Donations and Subscriptions for 1873.

Donation from Miss Rutherford, Milnathort, per Miss Mac- Lagan .....	£0 10 0	Ditto, per Miss Strang.....	£1 12 0
Subscriptions per Miss Burton .	1 0 0	Ditto, per Miss Binnie.....	1 18 6
Ditto, per Mrs. Van Buren.....	1 9 6	Ditto, per Miss Gray .....	1 12 6
Ditto, per Miss Campbell .....	1 16 0	Donation from Local Secretary.	0 10 0
		Total .....	£10 8 6

## STROUD.

May 5.—By cash.....£12 0 6

Mr. John Bryant, King Street, Stroud.....	£0 10 6	J. H. Carpenter, Esq., Cains- cross, near Stroud.....	£0 10 6
Mr. William Miles, Wallbridge, Stroud.....	0 10 6	Lieut.-Col. Stather, Wood chester, near Stroud .....	1 1 0
Mr. John Randall, Stroud .....	0 10 6	Mr. E. Rouse, Stroud .....	0 10 6
Edwin Witchell, Esq., Stroud .	0 10 6	Mr. James Harper, Ebley, near Stroud.....	0 10 6
L. W. Winterbotham, Esq., Rowcroft, Stroud .....	1 1 0	Geo. Gillson, Esq., Stroud .....	0 10 6
Sidney Biddell, Esq., Stroud ...	1 1 0	W. Cowle, Esq., Stroud .....	0 10 6
Dr. W. H. Paine, Stroud .....	1 0 0	John Libby, Esq., Stroud .....	0 10 6
P. H. Fisher, Esq., Stroud.....	0 10 6	Mr. W. Thomas, Cainscross Road, near Stroud.....	0 10 6
J. H. Taunton, Esq., Brims- combe, near Stroud .....	0 10 6	Mr. T. S. Osborne, Stroud.....	0 10 6
Rev. J. G. Uwins, Ebley, near Stroud.....	0 10 6		£12 0

## TEIGNMOUTH.

April 29.—By cash .....£2 6 6

Miss E. M. Stooks .....	£1 1 0	Rev. E. Strong .....	£0 5 0
W. A. Hunt, Esq. ....	0 10 0	Rev. H. Hutchins.....	0 10 6

## TIVERTON.

The following names have been forwarded :—

Rev. E. Heighton, Tiverton (for 1873, 5s.) .....	£0 5 0	Miss Graham, Tiverton .....	£1 0 0
Rev. J. Dickinson, Tiverton ...	0 5 0	H. Stokes, Esq., Springfield, Tiverton.....	0 10 0
G. T. Cock, Esq., Tiverton .....	0 5 0		

# LIST OF SUBSCRIPTIONS.

## TUNBRIDGE.

June 24.—By cash ..... £9 18 6

## TUNBRIDGE WELLS.

*Local Hon. Sec.*, Captain Palmer, R.E. Statement of account to Midsummer, 1873 :—

<i>Dr.</i>	£	s.	d.	<i>Cr.</i>	£	s.	d.
aW. F. Browell, Esq., for 1872	0	10	0	Paid for advertising .....	0	6	0
aMr. F. Skipwith, for 1872.....	1	1	0	Paid for postage .....	0	1	6
aRev. C. B. Bowles, for 1872 ...	1	0	0	Cheque for balance .....	9	13	6
aRight Rev. Bishop Trower, for 1872 .....	1	0	0				
aR. Janson, Esq., for 1873 .....	1	1	0				
Proceeds from lecture at Speld- hurst, by Captain Palmer, R.E., May 1st, 1873.....	5	14	0				
	£10	6	0		£10	6	0

## WHITBY.

May 3.—aMrs. Wells ..... £0 10 0

## WINDSOR.

March 31st.—Proceeds of Meeting ..... £17 15 9

## YORK.

The Committee would be very glad to hear from any gentleman willing to act as hon. secretary for this city.

April 26.—G. M. T.....	£0	3	0
May 31.—G. M. T. ....	0	10	6
April 29.—aW. Phillips, Esq. ....	1	1	0
May 31.—aJohn Pearson, Esq. ....	1	1	0

# LIST OF LECTURES AND MEETINGS.

REV. HENRY GEARY.

Place.	Date.	Proceeds.		
		£	s.	d.
St. Paul's, South Hampstead	Jan. 7	8	10	0
Ramsgate	Feb. 13	8	16	8
Uppingham School	Mar. 10	15	14	6
St. John's, Walham Green	" 28	5	2	0
St. John's, Fitzroy Square	May 2	6	4	6

REV. GEORGE ST. CLAIR.

Keighley	March 10	9	14	0½
Halifax	" 11	15	6	0
Skipton	" 12	10	6	0
Cross Hills	" 13	7	6	3
Sowerby	" 17	5	0	0
Darwen	" 18	15	0	6
Fleetwood	" 19	7	10	0
Preston	" 20	20	6	3
Eccles	" 21	9	16	0
Leigh	" 24	9	12	6½
Macclesfield	" 25	12	2	0
Mossley	" 26	7	14	1
Middlewich	" 27	5	17	6
Stafford	" 28	6	0	6
Aylesbury	" 31	10	11	8
Buckingham	April 1	3	6	4
High Wycombe	" 2	10	19	0
Ealing	" 3	1	18	0
Wotton	" 4	5	15	6
Barnsley	" 17	12	10	4½
Wakefield	" 18	7	7	0½
Bowdon	" 21	16	4	10
Bradford	" 22	11	15	6
Pateley Bridge	" 23	10	4	9
Knaresborough	" 24	6	7	8½
Harrogate	" 25	6	0	7
Ilkley	" 28	7	12	5
Stockton	" 29	22	4	8½
Durham	" 30	12	4	8½
Shields	May 1	6	5	7



## LECTURES.

Place.				Date.				Proceeds.		
								£	s.	d.
Morpeth	...	...	...	May	2	...	...	7	3	7
Darlington	...	...	...	"	5	...	...	8	10	6
Bedale	...	...	...	"	7	...	...	3	3	6

The following donations and subscriptions are included in the proceeds, but the expenses are not included :—

Walham Green :—								£	s.	d.
	Mrs. Batty	...	...	...	...	...	...	1	1	0
	aMrs. Harding	...	...	...	...	...	...	0	2	6
St. John's, Fitzroy Square :—										
	Anon	...	...	...	...	...	...	2	0	0
Keighley :—										
	aJohn Brigg, Esq., J. P.	...	...	...	...	...	...	1	1	0
	aSwiren Smith, Esq.	...	...	...	...	...	...	0	10	6
	aRobert Cleugh, Esq.	...	...	...	...	...	...	0	10	6
Halifax :—										
	Lit. and Philosoph. Society	...	...	...	...	...	...	4	4	0
	aW. Craven, Esq.	...	...	...	...	...	...	1	1	0
	aMrs. Joseph Crossley	...	...	...	...	...	...	1	1	0
	aLady Crossley	...	...	...	...	...	...	2	2	0
	aMiss Crossley	...	...	...	...	...	...	1	1	0
	aAlderman J. Baintow..	...	...	...	...	...	...	1	1	0
	aJ. E. Hill, Esq.	...	...	...	...	...	...	0	10	6
	aJohn E. Champney, Esq.	...	...	...	...	...	...	1	1	0
	aM. Smith, Esq.	...	...	...	...	...	...	1	1	0
	aG. W. Whiteley, Esq...	...	...	...	...	...	...	0	10	6
Skipton :—										
	aJ. B. Dewhurst, Esq. ...	...	...	...	...	...	...	1	1	0
	aRev. E. F. Hardwick ...	...	...	...	...	...	...	1	1	0
	aThos. Laycock, Esq. ...	...	...	...	...	...	...	0	10	6
	aR. Cockshott, Esq. ...	...	...	...	...	...	...	0	5	0
	aRev. T. Windsor	...	...	...	...	...	...	0	5	0
	aJ. Tasker, Esq.	...	...	...	...	...	...	0	5	0
Cross Hills :—										
	aG. Parkinson, Esq.	...	...	...	...	...	...	0	10	6
	aJ. C. Horsfall, Esq.	...	...	...	...	...	...	0	10	6
	aRev. W. E. Arden	...	...	...	...	...	...	0	10	6
Sowerby :—										
	aW. Morris, Esq.	...	...	...	...	...	...	0	10	6
Darwen :—										
	aRev. H. H. Moore	...	...	...	...	...	...	0	10	6
	aRev. W. B. Berry	...	...	...	...	...	...	0	10	6
	aRoger Lightbarn, Esq.	...	...	...	...	...	...	0	10	6
	aRev. J. McDougall	...	...	...	...	...	...	1	1	0
	aW. Snape, Esq.	...	...	...	...	...	...	1	1	0

## LECTURES.

£ s. d.

## Darwen :—

a Eccles Shorrock, Esq., J. P....	...	...	...	...	...	1	1	0
a Joseph Place, Esq. ....	...	...	...	...	...	1	1	0

## Fleetwood :—

J. A. Hewlett, Esq. ....	...	...	...	...	...	0	10	6
J. Worthington, Esq. ....	...	...	...	...	...	1	1	0

## Preston :—

a Rev G. Steele ...	...	...	...	...	...	1	1	0
a J. J. Greaves, Esq. ....	...	...	...	...	...	0	10	6
a W. Pollard, Esq. ....	...	...	...	...	...	2	2	0
a Miss White ...	...	...	...	...	...	0	10	6
a Rev. E. F. Linton ...	...	...	...	...	...	0	10	6
a Rev. W. M. Myles ...	...	...	...	...	...	0	10	6
a T. K. Bolton, Esq. ....	...	...	...	...	...	0	10	6

## Eccles :—

a Alex. Gibson, Esq., jun. ....	...	...	...	...	...	0	10	6
a J. T. Clegg, Esq. ....	...	...	...	...	...	1	1	0
a Thos. Clegg, Esq. ....	...	...	...	...	...	0	10	6
a J. Heelas, Esq. ....	...	...	...	...	...	1	1	0

## Leigh (belongs to Romsey lecture, Feb. 21):—

C. Fluder Smith, Esq. ....	...	...	...	...	...	0	10	6
----------------------------	-----	-----	-----	-----	-----	---	----	---

## Macclesfield :—

E. Clarke, Esq. ....	...	...	...	...	...	1	0	0
J. O. Nicholson, Esq. ....	...	...	...	...	...	0	10	6
Messrs. Swinnerton and Brown	...	...	...	...	...	0	16	0

## Mossley :—

G. Andrew, Esq. ....	...	...	...	...	...	1	1	0
----------------------	-----	-----	-----	-----	-----	---	---	---

## Middlewich :—

J. Pownall, Esq. ....	...	...	...	...	...	1	1	0
Rev. Henry Godwin ...	...	...	...	...	...	0	5	0

## Stafford :—

Miss Newbold ...	...	...	...	...	...	0	10	6
B. P. Wright, Esq. ....	...	...	...	...	...	0	10	6
Anon .. ...	...	...	...	...	...	0	5	0
W. Silvester, Esq. ....	...	...	...	...	...	0	10	6

## Aylesbury :—

a Miss Deacon ...	...	...	...	...	...	0	10	6
Ven. Archdeacon Bickersteth	...	...	...	...	...	5	0	0

## Buckingham :—

a W. Henry French, Esq. ....	...	...	...	...	...	0	10	6
a T. R. Watts, Esq. ....	...	...	...	...	...	0	5	0

## High Wycombe :—

a J. Emerson, Esq. ....	...	...	...	...	...	0	10	6
a F. Lucas, Esq. ....	...	...	...	...	...	1	1	0
a Thos. Wheeler, Esq. (to begin in 1874)	...	...	...	...	...	1	1	0

## Ealing :—

a H. D. Davenport, Esq. ....	...	...	...	...	...	1	1	0
------------------------------	-----	-----	-----	-----	-----	---	---	---

## Wotton :—

a J. Evershed, Esq. ....	...	...	...	...	...	0	5	6
--------------------------	-----	-----	-----	-----	-----	---	---	---

	£	s.	d.
Barnsley:—			
a Rev. W. J. Binder ... ..	0	10	6
a John Shaw, Esq. ... ..	0	10	6
a Rev. W. Elmhirst ... ..	0	10	6
a Richard Jones, Esq. ... ..	0	10	6
a J. H. Watson, Esq. ... ..	1	0	0
a J. Cass, Esp. ... ..	0	10	6
Thomas Lingard, Esq. ... ..	0	5	
Wakefield:—			
a Isaac Briggs, Esq. ... ..	1	0	0
a W. Baker, Esq. ... ..	1	1	0
Bowdon:—			
a Edmund Joynson, Esq. ... ..	1	1	0
a John Allen, Esq. ... ..	1	1	0
a A. Neild, Esq. ... ..	1	1	0
a John Carlisle, Esq. ... ..	1	1	0
a Edward Jackson, Esq. ... ..	1	1	0
Anon ... ..	0	10	6
a J. A. Howden, Esq. ... ..	1	1	0
J. E. Whalley, Esq. (promised) .. ..	0	10	6
Bradford:—			
a Miss Charlotte Prince .. ..	1	1	0
Pateley Bridge:—			
a Rev. J. B. James ... ..	0	10	6
a E. Warburton, Esq. ... ..	1	1	0
a Rev. S. Gray ... ..	0	10	6
Knaresborough:—			
Mrs. Reade ... ..	0	10	0
Rev. H. Cross ... ..	0	10	6
Ilkley:—			
a T. Scott, Esq., M.D. ... ..	0	10	6
a— Thomson, Esq. ... ..	1	0	0
Stockton:—			
a W. B. Brayshay, Esq. ... ..	1	1	0
T. Crosby, Esq. (for 1872 and 1873) ... ..	4	4	0
a Andrew Watson, Esq. ... ..	0	10	6
a W. Barrett, Esq. ... ..	1	1	0
a T. Appleby, Esq. ... ..	1	10	0
J. Whitwell, Esq. (2nd don.) ... ..	5	0	0
C. Bone, Esq. (2nd don.) ... ..	1	1	0
J. Laidler, Esq. (2nd don.) ... ..	1	1	0
Durham:—			
a Rev. Dr. Dykes ... ..	0	10	6
a Rev. J. J. Fowler ... ..	1	1	0
North Shields:—			
a Rev. T. White ... ..	0	10	6
Joseph Ogilvie, Esq. ... ..	0	10	6
Morpeth:—			
a F. Brumell, Esq. ... ..	0	10	6

## LECTURES.

								£	s.	d.
aH. Taylor, Esq.	...	...	...	...	...	...	...	1	1	0
aT. Hopper, Esq.	...	...	...	...	...	...	...	0	10	6
aW. Reay, Esq....	...	...	...	...	...	...	...	0	10	0
aDr. Robinson ...	...	...	...	...	...	...	...	0	10	6
Rev. — Thorburn	...	...	...	...	...	...	...	0	2	6
Rev. David Young	...	...	...	...	...	...	...	0	10	6
Bedale:—										
aJohn Spence, Esq.	...	...	...	...	...	...	...	0	10	6

---

## ERRATA.

Omitted from last *Quarterly*.

Jan. 13. D. M. Peebles, Esq. ....	£1	1	0
Henry Brown, Esq. ....	1	1	0
Do. for Jerusalem Fund ...	1	1	0
Rev. John Gemmell .....	0	10	6

Rev. W. H. Walford, entered as *annual*, should have been *donation*.

---

## PUBLICATIONS OF THE SOCIETY.

*Bentley and Son.*

The Recovery of Jerusalem, One Guinea.

Our Work in Palestine, 3s. 6d.

Nos. 1 to 8.—The earlier papers, which have mostly been embodied in subsequent publications, are now out of print, except Captain Warren's Notes on the Valley of the Jordan and Excavations at Ain es Sultan (Jericho).

9—15. Quarterly Statement. Vol. I. Nos. I. to VII.

These Nos. are now all out of print, except 5, 6, and 7, which contain, among other matter—The History of the Moabite Stone—Captain Warren on Lebanon and the Temples of Cœle-Syria—Captain Warren's Journey to East of Jordan—Letters from Mr. E. H. Palmer—Mr. Simpson on the Royal Quarries—Plan of the Haram Area, showing Excavations—&c., &c.

16—19. Quarterly Statement. New Series. Nos. I. to IV., 1871, containing—The Desert of the Tih and the Country of Moab, by Prof. E. H. Palmer, with large map and illustrations—Map of Moab—Captain Warren on the Plain of Philistia—Prof. Palmer on the Lebanon—M. Clermont Ganneau on certain New Discoveries—The Building of the Mosque of Omar, by Prof. E. H. Palmer—Captain Warren's Latitudes and Longitudes—Mr. Hyde Clarke on the Pre-Israelite Inhabitants of Palestine—&c., &c.

Nos. I. and III. are out of print.

20—24. Quarterly Statement for 1872, containing—Papers from Capt. Stewart, Mr. C. F. Tyrwhitt Drake, Lieut. C. R. Conder, Captain Wilson, Captain Warren, Captain Burton, Mr. Glaisher, Mr. Grove, Rev. F. W. Holland, Mr. Dugald Campbell, Mr. Hyde Clarke, Dr. Alexander Buchan, Rev. H. E. Northey, Rev. J. E. Bailey, Mr. George Smith, and Rev. Dunbar Heath.

The January number is out of print.

25—27. Quarterly Statement, for Jan. April, and July, 1873, containing Progress of the Survey, Discoveries in Jerusalem, &c.

## LOCAL ASSOCIATIONS.

ALLOA : *Hon. Sec.*—Rev. Alexander Bryson.

ABERDEEN : *Hon. Sec.*—Rev. Prof. Milligan, D.D.

ALNWICK : *Hon. Sec.*—Edward Allen, Esq.

ARBROATH : *Hon. Sec.*—W. J. Anderson, Esq.

AYR : *Hon. Sec.*—Robert Murdoch, Esq.

BASINGSTOKE : *Hon. Sec.*—Rev. W. Marriner.

BATH : *Hon. Sec.*—Rev. T. P. Methuen.

BEDFORD : *Hon. Sec.*—Rev. Canon Haddock.

BIRKENHEAD : *Hon. Secs.*—Rev. J. T. Kingsmill and T. Bell, Esq., St. Aidan's College.

BIRMINGHAM : *Hon. Sec.*—



# LIST OF SUBSCRIPTIONS.

JUNE 30TH TO SEPTEMBER 22ND, 1873.

*a* denotes Annual Subscriber.

\* If any omission or mistake be observed in the following lists, the Secretary will be glad to be informed of it, and will rectify the error in the next *Quarterly Statement*.

## SPECIAL JERUSALEM FUND.

Amount already advertised in July *Quarterly* ..... £58 12 0

## SURVEY AND GENERAL PURPOSES.

	£	s.	d.		£	s.	d.
<i>a</i> Rev. Dr. Allon .....	1	1	0	<i>a</i> C. R. Cope, Esq.....	1	0	0
<i>a</i> Rev. C. Alderson .....	1	1	0	Miss Copley ( <i>a</i> £1).....	2	0	0
<i>a</i> G. Ashworth, Esq. ....	1	1	0	General Cracklow .....	2	2	0
<i>a</i> Admiral Aldham.....	1	1	0	<i>a</i> J. H. Cooke, Esq. ....	1	0	0
<i>a</i> Charles Ashton, Esq. ....	1	0	0	J. M'Connell, Esq.....	5	0	0
<i>a</i> J. P. Bacon, Esq. ....	5	0	0	J. W. C. ....	20	0	0
J. Backhouse, Esq.....	10	0	0	<i>a</i> R. H. Dawson, Esq. ....	1	1	0
<i>a</i> Rev. E. B. Badcock .....	1	1	0	W. Dawson, Esq. ( <i>a</i> 10s. 6d.)	1	1	0
<i>a</i> Rev. James Bagge .....	1	1	0	G. Dent, Esq. ....	1	1	0
<i>a</i> J. A. Bastow, Esq.....	0	10	6	<i>a</i> Rev. James Disney.....	0	10	6
<i>a</i> Rev. T. M. R. Barnard .....	0	10	6	Charles Druitt, Esq. ....	0	10	0
<i>a</i> W. Bartlett, Esq. ....	2	2	0	<i>a</i> Prof. Donaldson .....	1	1	0
<i>a</i> Lewis Biden, Esq. ....	1	1	0	A. Dunn, Esq. (in addition to			
J. Bishop, Esq. ....	5	0	0	£1 ls. already subscribed)...	1	1	0
R. W. Biggs, Esq. ( <i>a</i> £1) .....	2	0	0	<i>a</i> Rev. Dr. Oswald Dykes.....	1	1	0
E. T. Blakely, Esq. ....	0	10	6	<i>a</i> J. Engall, Esq.....	1	1	0
<i>a</i> J. E. Blackstone, Esq. ....	1	1	0	<i>a</i> Josiah Evans, Esq.....	2	2	0
<i>a</i> Archdeacon Boutflower .....	2	2	0	<i>a</i> Joseph Evans, Esq.....	2	2	0
Mrs. Bromehead.....	1	1	0	Dr. Eveleigh .....	10	0	0
Isaac Brown, Esq. ....	1	1	0	<i>a</i> E. Finlay, Esq. ....	0	10	6
R. Clayton Brown, Esq., jun.	1	1	0	C. F. Fellows, Esq. (proceeds			
Isaac Braithwaite, Esq. ....	2	0	0	of Lecture) .....	4	0	0
C. Llewelyn Braithwaite, Esq.	1	1	0	"A Friend" .....	5	0	0
<i>a</i> Rev. J. Ingham Brooke.....	1	1	0	Rev. A. E. Foster .....	1	0	0
G. Burns, Esq. ....	5	0	0	C. Fraser, Esq. ....	1	1	0
<i>a</i> Mrs. Calvert .....	1	1	0	<i>a</i> Mrs. Gamble .....	5	5	0
<i>a</i> J. C. Church, Esq.....	1	1	0	<i>a</i> Col. Gawler .....	1	1	0
<i>a</i> Mrs. Charm .....	1	1	0	<i>a</i> Rev. T. George .....	0	10	0
<i>a</i> Captain Clarke .....	1	1	0	<i>a</i> E. W. Gere, Esq. ....	0	10	6
Rev. J. Meek Clark .....	5	5	0	<i>a</i> Miss Greathead .....	1	1	0
<i>a</i> Mrs. Cleaver .....	1	1	0	<i>a</i> J. Grant, Esq.....	1	1	0
Rev. J. Cochrane, D.D.....	1	4	0	<i>a</i> Dr. Green.....	1	1	0

# LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
aRev. Myles Greenwood .....	1	1	0	aMiss Mulholland.....	1	1	0
aW. Griffith, Esq. ....	1	1	0	S. Morley, Esq., M.P. ....	100	0	0
aRev. J. Temperley Grey.....	0	5	0	aRev. A. E. Northey .....	2	2	0
aRev. A. Gray .....	0	10	0	aCharles Netter, Esq. ....	0	10	6
aJ. Greenhalgh, Esq. ....	1	1	0	aS. H. Officer, Esq. ....	5	5	0
J. E. G. ....	5	0	0	aDr. W. Ogle .....	1	1	0
aMrs. Hamilton .....	1	1	0	H. M. Ormerod, Esq. ....	10	0	0
aLloyd Harris, Esq. ....	0	10	6	aR. L. Poole, Esq. ....	0	10	6
aRev. E. J. Hardwick.....	0	10	0	aE. H. Palmer, Esq. ....	5	0	0
aF. Harmer, Esq. ....	1	1	0	aRev. Thompson Phillips .....	0	10	0
aC. H. Hawkins, Esq. ....	0	10	0	Rev. Professor Pusey .....	15	15	0
Capt. Henderson, R.N. ....	1	0	0	Miss J. Pinn .....	1	1	0
aJ. Hellings, Esq. ....	1	1	0	aJ. F. Paul, Esq. ....	0	10	6
F. Hermon, Esq., M.P. ....	5	0	0	aH. S. Perry, Esq. ....	1	0	0
aRev. Melsup Hill .....	1	1	0	aJoseph Pollard, Esq. ....	1	1	0
aA. S. Hobson, Esq. ....	1	1	0	aH. Richardson, Esq. ....	1	1	0
Rev. A. Holborn.....	3	0	0	aMrs. Rouse .....	0	5	0
Rev. Canon Hopkins .....	5	0	0	aMiss Relton .....	0	5	0
aH. J. Hood, Esq. ....	1	1	0	W. Robinson, Esq. ....	2	2	0
aAlfred Howson, Esq. ....	1	1	0	M. R. ....	5	0	0
J. J. Houghton, Esq. (a £1 ls.)	5	0	0	Rev. E. W. Russell.....	0	5	0
aRev. W. Inge .....	1	1	0	G. Russell, Esq. ....	1	1	0
aMrs. Johnston .....	0	10	6	S. Scott, Esq. (a£1 ls) .....	2	2	0
aMrs. Johnson .....	0	10	6	aRev. G. H. Scott .....	0	10	0
aLlewelyn Jones, Esq. ....	1	1	0	aHalsall Segar, Esq. ....	1	1	0
aRev. Dr. Jessop .....	1	1	0	Simla, collected by Rev. J.			
aF. Joyner, Esq. ....	0	10	6	Mackay .....	35	6	4
aDr. Kally .....	0	10	6	aJ. H. Simmonds, Esq. ....	1	1	0
Rev. G. Kemp.....	2	2	0	aJ. Simpson, Esq. ....	1	0	0
Rev. A. Lambert—Collection				Miss Ellen Smith .....	0	3	0
at Monk Beeton Church ...	1	8	8	aB. Smith, Esq. ....	1	1	0
aJ. J. Kerr, Esq. ....	1	0	0	aCol. Smyth .....	1	1	0
J. Lamb, Esq. ....	1	1	0	F. Spence, Esq. (a£1 ls) .....	3	3	0
aC. Lambert, Esq. ....	0	10	0	aRev. S. E. Stanhope .....	1	1	0
aLord Lawrence .....	5	0	0	aGen. Stanhope .....	1	1	0
aMiss Lawrence .....	0	10	0	aW. Cunningham Steele, Esq. ....	1	1	0
aMiss S. Lane .....	0	10	6	aRev. Dr. Stoughton .....	1	1	0
Mrs. Lawes .....	5	0	0	aRev. G. W. Stratton .....	1	1	0
Miss Legg .....	0	10	6	aSunday School Union.....	5	0	0
Hon. Waldegrave Leslie .....	10	0	0	aJoshua Swann, Esq. ....	1	1	0
aA. H. Leas, Esq. ....	1	1	0	Mrs. Sykes .....	2	0	0
aJ. McIntock, Esq. ....	0	10	6	aRev. J. Taylor, D.D. ....	0	10	6
G. B. Lloyd, Esq. ....	21	0	0	aMessrs. Thorp Bros. ....	1	1	0
aArthur Lupton, Esq. ....	1	1	0	aRev. J. J. Thornley .....	0	10	6
Rev. Canon Lysons.....	1	0	0	aJ. D. Thomas, Esq. ....	0	2	6
Rev. Joseph Lyon .....	5	0	0	aHenry Thomas, Esq. ....	1	1	0
aJohn Marsh, Esq. ....	0	10	0	aGeorge Tindle, Esq. ....	1	1	0
aJ. Macdonald, Esq. ....	1	1	0	Rev. W. G. Tomkins (proceeds			
H. M. Morgan, Esq. ....	0	10	6	of Lecture at Weston-super-			
aMrs. Martin .....	1	1	0	Mare) .....	4	2	6
aW. Millar, Esq. ....	1	1	0	Hon. Otway Toler .....	1	0	0
Mrs. Monk .....	20	0	0	H. Treacher, Esq. ....	1	1	0
M. S. ....	5	0	0	R. J. Turnbull, Esq. ....	1	1	0
Henry Marshall, Esq. ....	2	0	0	aC. J. Valentine, Esq. ....	0	10	6
aRev. J. Marshall.....	1	1	0	Henry Vaughan, Esq. ....	20	0	0
aMrs. Muir .....	0	10	0	aRev. W. Vincent .....	1	1	0
aJ. J. Minshall, Esq. ....	0	10	0	aMrs. Wasey .....	1	0	0
John Morley, Esq. ....	0	10	6	aRev. J. J. Wilson .....	1	1	0
Mr. and Mrs. Methuen (a £1).	5	0	0	aJ. S. Wright, Esq. ....	1	1	0

LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
αMiss Warren .....	1	1	0	A. H. Lees, Esq. ....	1	1	0
αMiss Williams .....	1	1	0	Mrs. Locock .....	2	2	0
αJ. Robison Wright, Esq. ....	5	0	0	W. A. Plumptre .....	0	10	0
John Watson, Esq. ....	0	10	6	Paid into Coutts's Bank—			
Misses Wight .....	2	2	0	Rev. L. G. C. Cure.....	2	2	0
αMrs. Wolf .....	1	1	0	Rev. R. Powell .....	0	10	6
W. P. Bath .....	0	5	0	Arthur Case, Esq. ....	1	1	0
Paid into Union Bank—				W. G. Evans, Esq. ....	0	13	0
Thos. Greene, Esq. ....	1	1	0	F. Hansen, Esq. ....	2	2	0
J. Morrell, Esq. ....	1	1	0	H. Peto, Esq. ....	1	0	0
J. P. Pritchett, Esq. ....	1	1	0	J. Percival, Esq. ....	4	0	0
Alex. Fothergill, Esq. ....	0	10	6	R. M. Norman, Esq. ....	10	0	0
G. Harris, Esq. ....	1	1	0				

## LOCAL SOCIETIES.

ABERDEEN.

July 10.—By cash ..... £14 14 5

With the following list :—

Very Rev. Archdeacon Bisset (for Jerusalem), Lessendrum...	£1 0 0	David Mitchell, Esq., 24, Adelphi	0 2 6
Do. (for Fund)...	2 0 0	John Smith, Esq., 265, Union-st.	1 1 0
Professor Forbes, Aberdeen .....	0 10 6	Andrew Murray, Esq., 103, Union-street .....	0 10 6
Professor Milligan, Aberdeen .....	0 5 0	Rev. Henry Cowan, 34, Skene-terrace .....	0 10 6
Mrs. Hargrave, at Dr. Ogston's, Union-st.	0 10 6	T. A. Murray, Esq., 19, Union-buildings.....	0 5 0
		Alex. Simpson, Esq., 35, Castle-st.	0 5 0
	*£1 6 0	Rev. A. F. Moir, F. C. Manse, Woodside, Aberdeen.....	0 10 6
W. Hunter, Esq., Adelphi .....	0 10 0	Mrs. John Crombie, Cotton-lodge	0 10 6
Miss Black, 6, Albyn House. ...	1 0 0	Lady Anderson, 16, Union-terrace	0 10 6
W. Smart, Esq., 1, Langstane-place .....	0 10 6	Dr. Ogston, 256, Union-street	0 10 6
George Thompson Law, of Pitmedden, Aberdeen.....	0 10 6	— Ogg, Esq., 15, Adelphi .....	0 5 0
W. Henderson, Esq., Devanha House .....	0 10 6	Captain Tulloch, Viewmount-cottage (for 1872 and 1873)...	1 0 0
J. Aitken, Esq., 57, Marischal-street .....	0 10 6	John Morrison, Esq., 15, Constitution-street .....	0 10 0
T. Marr, Esq., 218, Union-street	1 1 0	Miss Gow, 148, Alexandra-road, St. John's Wood, London ...	0 10 6
Charles Chalmers, Esq., of Monkshill .....	0 10 0	Collected.....	20 3 0
John F. White, Esq., 107, King-street .....	0 10 0	Sent Nov. 26 and Jan. 1.	4 6 0
— Stronach, Esq., 71, King-street .....	0 10 6		15 17 0
Alex. Nicol, Esq., 29, Albyn-place .....	0 10 6	Collector's charge ... £0 16 0	
Geo. Jamieson, Esq., 38, Albyn-place .....	0 10 6	Postal cards .....	0 2 6
P. Eplemont, Esq., 17, Silver-street .....	0 10 6	Book, Postage, &c. ...	0 3 6
Jas. Chalmers, Esq., Westbourne	1 0 0		1 2 0
Carried forward .....	£13 1 0	Cost of Bank order .....	0 0 7
		Remitted now .....	£14 14 5
			W. MILLIGAN.

\* Reported and money sent two or three months ago.

# LIST OF SUBSCRIPTIONS.

## BATH.

July 26.—Captain Anderdon ..... £2 0 0  
 Sept. 4.—W. P. .... 0 5 0

## BIRKENHEAD.

July 29.—Per Rev. Saumarez Smith ..... £25 0 0

## BLAIRGOWRIE.

Mr. W. S. Soutar has kindly consented to act as Hon. Secretary to the Fund for this town.

## BRIGHTON.

Aug. 22.—Miss Mary Ridding ..... £5 0 0

## CAMBRIDGE.

Aug. 21.—Rev. J. B. Pearson..... £5 0 0

## CLIFTON.

July 26.—Per Rev. J. B. Goldberg ..... £5 5 0

Received for the Palestine Exploration Fund, 1873:—		Paid on behalf of the same:—	
Mr. T. J. Whittuck .....	£1 0 0	<i>Clifton Chronicle</i> , for printing	£0 9 0
Rev. J. B. Goldberg .....	0 10 6	Advertising in <i>Times</i> and <i>Mirror</i> .....	0 5 0
Miss Russels.....	1 0 0	Cheque to Secretary (March) ..	3 10 0
Rev. C. H. Wallace.....	1 0 0	Stamps for sending out Circulars .....	0 12 0
Miss Ware .....	0 10 0	Telegrams by Mr. W.....	0 2 0
Miss Moore .....	1 0 0	Carriage for parcel .....	0 1 6
Collected by Mrs. Nottey:—		Cheque to Secretary (July) ...	5 5 0
A Friend .....	0 5 0		
M. A. ....	0 2 6		
F. C. ....	0 2 6		
L. M. ....	0 2 6		
Mrs. Holman .....	0 5 6		
Mrs. Goldberg (for Special Jerusalem Fund).....	0 10 6		
Miss Harris .....	0 10 6		
Miss Holmes .....	0 5 0		
Dowager Lady Mackworth ...	0 10 0		
Mrs. Macgovern .....	2 0 0		
Rev. T. H. Clark .....	0 5 0		
Rev. W. H. Barlow .....	0 5 0		
Total .....	£10 4 6		£10 4 6

## COUPAR ANGUS.

αVery Rev. Dean Torry ..... £0 10 0

# LIST OF SUBSCRIPTIONS.

## EDINBURGH.

Aug. 1.—James Swire, Esq. .... £1 0 0

Aug. 30.—Per J. P. Slater :—

Sir F. Outram ..... 5 0 0

For *Quarterly Statements* ..... 0 6 0

## GLASGOW.

George Burns, Esq. .... £5 0 0

Alexander Stephen, Esq. .... 1 1 0

H. R. Wood, Esq. .... 2 2 0

J. McLintock, Esq. .. 0 10 6

Aug. 29.—Col. Carrick Buchanan ..... 5 0 0

Aug. 30.—Per George Readman, Esq ..... 70 0 5

With the following list :—

Gillespie, Cathcart, & Fraser (don.) .....	£4 4 0	Rev. John Calder (don.) .....	£1 0 0
Daniel Forbes (don.) .....	2 2 0	Mrs. Lormer .....	1 1 0
aRev. G. C. M. Douglas .....	1 1 0	aRutherford Bros. ....	2 0 0
Miss Janet Black (don.) .....	1 0 0	aThos. Barclay .....	1 1 0
aRutherford Bros. ....	2 0 0	aJames Mitchell .....	2 0 0
aRev. G. C. M. Douglas .....	1 1 0	aRev. G. C. M. Douglas .....	1 1 0
aThos. M. Ferguson .....	2 0 0	aW. Ewing .....	10 0 0
aJohn Hamilton.....	1 1 0	aJames Harman .....	1 1 0
aDr. Jamieson.....	1 1 0	aPer James Lumsden.....	1 1 0
aRev. Dr. Henderson.....	1 0 0	aMrs. J. G. Lormer .....	1 1 0
aRev. A. A. Bonar.....	1 0 0	R. Napier .....	10 0 0
aRobert Kerr .....	1 1 0	Mr. Crouch (don.) .....	0 10 0
J. S. Napier (don.) .....	1 1 0	aThomas Barclay ..	1 1 0
aJas. McLehose .....	1 1 0	P. B. Inner (don.) .....	1 0 0
aJohn McLaren .....	1 1 0		
aJames Harman .....	1 0 0		50 15 0
aProfessor Dickson .....	1 0 0		19 17 0
aDr. D. H. Weir .....	1 0 0		
aRev. G. A. Pantou .....	1 1 0	Add Interest from Bank .....	70 12 0
James Whingate (don.) .....	1 0 0		1 0 5
aDr. Bryce (2 years) .....	2 0 0		
W. S. Waddell (don.) .....	1 0 0	Deduct sundry accounts paid,	71 12 5
Alex. Mitchell (don.) .....	1 0 0	Stationery, &c. ....	1 12 0
Alex. Paterson (don.) .....	1 0 0		
Geo. Lumsden (don.) .....	5 0 0		£70 0 5

Glasgow, 29th Aug., 1873.

GEO. READMAN, *Hon. Treas.*

## HALIFAX.

a Archdeacon Musgrave ..... £1 1 0

a John Waterhouse ..... 1 1 0

a Sir Titus Salt ..... 2 2 0

## HUDDERSFIELD.

Aug. 20.—J. W. C. .... £20 0 0



# LIST OF SUBSCRIPTIONS.

## HUNTINGDON.

Aug. 12.—By Cash ..... £2 12 0

Viz. : Mrs. J. S. Smith ..... £1 1 0

Archdeacon Bathurst ..... 0 10 0

Rev. Canon Vesey ..... 1 1 0

## IPSWICH.

By cash ..... £7 6 0

1873.

Rev. J. R. Turnock ..... £0 10 0

W. Brown, Esq. .... 1 1 0

W. Fraser, Esq. .... 1 1 0

Rev. S. Garratt ..... 1 1 0

Ven. Archdeacon Groome ..... 1 1 0

J. C. Cobbold, Esq. .... 1 1 0

G. C. E. Bacon, Esq. .... 1 0 0

S. Westhorpe, Esq. .... 0 10 6

Rev. Canon Potter ..... 1 1 0

Deduct .....  
8 6 6  
1 0 6

Balance ..... £7 6 0

1873.

Expenses incurred by Rev. J.

R. Turnock, 1871 ..... £0 15 6

Do. do. in 1872 ..... 0 5 0

£1 0 6

## LIVERPOOL.

aJohn Bewley, Esq. .... £1 1 0

aRev. W. R. Blackett ..... 0 10 6

aJ. Blackett, Esq. .... 0 10 6

## MANCHESTER.

Sept. 16.—By cash ..... £46 13 2

Names sent by Rev. W. F. Birch.

H. Crane, Esq. .... 0 10 6

aH. Birch, Esq. .... 2 2 0

## MIDDLESBOROUGH.

Rev. Adam Clarke Smith ..... £0 10 0

J. F. Wilson, Esq. .... 5 0 0

## NORTHAMPTON.

aJ. Osborn, Esq. .... £1 0 0

## NOVA SCOTIA.

aJ. M. Cramp, Esq. .... £1 1 0

## PAISLEY.

aJohn Clarke, Esq. .... £1 1 0

aA. MacAlpine, Esq. .... 0 10 6

aJohn Martin, Esq. .... 0 10 6

# LIST OF SUBSCRIPTIONS.

## PERTH.

Aug. 4.—*a*J. V. Ross, Esq. .... £1 1 0

## PLYMOUTH.

Sept. 12.—John Bayley, Esq. (3rd don.) ..... £10 0 0  
 Aug. 30.—*a*J. W. Shelly, Esq. .... 1 1 0  
 „     *a*John Shelly, Esq. .... 1 1 0

## ST. ALBANS.

Aug. 18.—Mrs. Lawes..... £5 0 0

## TEIGNMOUTH.

Rev. H. Hutchins ..... £0 10 0

## TORQUAY.

Sept. 12.—By cash ..... £3 2 0

## WELLS.

Aug. 11.—Bishop of Bath and Wells ..... £4 0 0  
 „     Rev. G. H. Fagan..... 0 10 0  
 „     Mrs. H. Brice ..... 0 5 0  
 „     W. Dore, Esq. .... 0 10 0

## WHITBY.

Sept. 2.—By cash..... £2 0 0  
 Viz : Mrs. Cholmley ..... 1 0 0  
       C. Bagnell, Esq..... 1 0 6

# LIST OF LECTURES AND MEETINGS.

REV. HENRY GEARY.

Place.	Date.	Proceeds.
		£ s. d.
Lille ... ..	Sept. 10	4 7 6
Croix ... ..	„ 11	15 1 3
Boulogne ... ..	„ 13	9 6 0

The following donations and subscriptions are included in the proceeds, but the expenses are not included :—

	£ s. d.
αMessrs. Holden et Fils, Croix (promised) ... ..	40 0 0
αJ. E. Wilson, Esq., Lille ... ..	1 1 0

## ERRATA.

Omitted from last *Quarterly*.

May 16. Edward Lewis, Esq. .... £1 1 0  
For J. Lee Laidler, read J. Lee Jardine.

## PUBLICATIONS OF THE SOCIETY.

*Bentley and Son.*

The Recovery of Jerusalem, One Guinea.

Our Work in Palestine, 3s. 6d.

QUARTERLY STATEMENT. First Series, 1869 and 1870.

This is now out of print, except Nos. V. and VI., containing, among other matter, Captain Warren's Papers on Lebanon, Coele-Syria, the East of Jordan, and Mount Hermon.

Second Series, 1871.

A few copies are still remaining of Prof. Palmer's Report on his Journey through the Desert of the Exodus. Price 2s. 6d. each, with a large map.

QUARTERLY STATEMENT for 1872.

The Nos. for April, July, and October, are still in print.

QUARTERLY STATEMENT for 1873.

These Nos. are all in print.

## LOCAL ASSOCIATIONS.

- ALLOA : *Hon. Sec.*—Rev. Alexander Bryson.  
 ABERDEEN : *Hon. Sec.*—Rev. Prof. Milligan, D.D.  
 ALNWICK : *Hon. Sec.*—Edward Allen, Esq.  
 ARBROATH : *Hon. Sec.*—W. J. Anderson, Esq.  
 AYR : *Hon. Sec.*—Robert Murdoch, Esq.  
 BASINGSTOKE : *Hon. Sec.*—Rev. W. Marriner.  
 BATH : *Hon. Sec.*—Rev. T. P. Methuen.  
 BEDFORD : *Hon. Sec.*—Rev. Canon Haddock.  
 BIRKENHEAD : *Hon. Secs.*—Rev. J. T. Kingsmill and T. Bell, Esq., St. Aidan's College.  
 BIRMINGHAM : *Hon. Sec.*—  
 BLAIRGOWRIE : *Hon. Sec.*—W. S. Soutar, Esq.  
 BLACKBURN : *Hon. Secs.*—Rev. Canon Birch and Rev. A. B. Grosart.  
 BODMIN : *Chairman of Local Committee*—Joseph Stevens, Esq.  
 BOLTON : *Hon. Sec.*—  
 BOTHWELL.—Through the "Bible Society" of the town.  
 BOURNEMOUTH : *Hon. Sec.*—Rev. Dr. Edersheim.  
 BRADFORD : *Hon. Sec.*—Rev. W. Dyson.  
 BRIGHTON : *Hon. Sec.*—Rev. C. E. Douglass.  
 BROADSTAIRS : *Hon. Sec.*—Rev. J. H. Carr.  
 BROMLEY : *Hon. Sec.*—Rev. W. J. Devereux.  
 BURNLEY : *Hon. Sec.*—Rev. H. A. Crosbie.  
 BURY : *Hon. Treas.*—Rev. Canon J. Hornby ; *Hon. Sec.*—Rev. W. Thorburn.  
 CALLINGTON : *Hon. Sec.*—Rev. F. V. Thornton.  
 CAMBRIDGE : *Hon. Sec.*—Rev. T. G. Bonney, Tutor of St. John's College.  
 CANADA : Toronto.—Subscriptions are kindly received by the Hon. G. W. Allan.  
 CARDIFF : *Hon. Sec.*—  
 CHELMSFORD : *Hon. Sec.*—H. S. Coleman, Esq.  
 CHELTENHAM : *Hon. Sec.*—Dr. E. Wilson.  
 CHESTER : *Hon. Sec.*—The Very Rev. the Dean of Chester.  
 CHIGWELL : *Hon. Sec.*—Rev. H. M. Robinson.  
 CHIPPENHAM : *Hon. Sec.*—A. T. Keary, Esq.  
 CLIFTON and BRISTOL : *Hon. Secs.*—Rev. C. H. Wallace and Rev. J. B. Goldberg.  
 COUPAR ANGUS : *President*—Very Rev. Dean Torry.  
 CROYDON : *Hon. Sec.*—Mr. Warren.  
 DARLINGTON : *Hon. Sec.*—J. P. Pritchett, Esq.  
 DEVIZES : *Hon. Sec.*—  
 DEVONPORT : *Hon. Sec.*—J. Venning, Esq.  
 DORCHESTER : *Hon. Sec.*—Rev. Handley Moule.  
 DOVER : *Hon. Sec.*—Mr. W. P. Mummery.  
 DUNDEE : *Hon. Sec.*—R. Mackenzie, Esq.  
 DURHAM : *Hon. Sec.*—Rev. J. Dodd.  
 DUNFERMLINE : *Hon. Sec.*—Rev. And. Brydie.  
 EASTBOURNE : *Hon. Sec.*—Rev. H. R. Whelpton.  
 EDINBURGH : *Hon. Secs.*—Rev. W. Lindsay Alexander, D.D., and T. B. Johnston, Esq., F.R.G.S., 4, St. Andrew Square.

# LOCAL ASSOCIATIONS.

- EXETER : *Hon. Sec.*—Rev. Prebendary Acland, Broad Clyst.
- FALMOUTH, for the County of Cornwall : *Hon. Secs.*—A. Lloyd Fox and W. P. Dymond, Esq.
- FARNHAM : *Hon. Sec.*—Rev. A. G. Kirby.
- FAVERSHAM : *Hon. Sec.*—Charles Smith, Esq.
- FORFAR : *Hon. Sec.*—T. Wilkie, Esq.
- FLEETWOOD : *Hon. Sec.*—G. Curwen, Esq.
- FROME : *Hon. Sec.*—Rev. T. G. Rooke.
- FOLKESTONE : *Hon. Sec.*—
- GLASGOW : *Hon. Secs.*—Rev. W. Dickson, D.D., Rev. Donald Macleod, D.D., and A. B. M'Grigor, Esq.
- GLOUCESTER : *Hon. Secs.*—Rev. J. Bowman and F. Cooke, Esq.
- GREENOCK : *Hon. Sec.*—D. MacDonald, Esq.
- GUILDFORD : *Hon. Sec.*—Capt. Campbell, R.N.
- HALIFAX : *Hon. Sec.*—J. H. Bracken, Esq.
- HALSTEAD : *Hon. Secs.*—Rev. S. J. Eales and Rev. J. W. Coombes.
- HASTINGS : *Hon. Sec.*—
- HELENSBURG : *Hon. Sec.*—Rev. A. Murray McCallum.
- HERTFORD : *Hon. Sec.*—W. M. Armstrong, Esq.
- HEXHAM : *Hon. Sec.*—John Hope, Esq., jun.
- HITCHIN : *Hon. Sec.*—David Lloyd, Esq.
- HUDDERSFIELD : *Hon. Sec.*—Henry Barker, Esq., Railway St., St. George's Sq.
- HULL : *Hon. Sec.*—J. P. Bell Esq., M.D.
- HUNTINGDON : *Hon. Sec.*—Rev. Gerald Vesey.
- INVERNESS : *Hon. Sec.*—Capt. Bolland, R.F.
- IPSWICH : *Hon. Sec.*—Rev. J. R. Turnock.
- IRVINE : *Hon. Sec.*—Adam Sutherland, Esq.
- KIRKALDY : *Hon. Sec.*—John Barnett, Esq.
- LEEDS : *Hon. Sec.*—Edward Atkinson, Esq.
- LEITH : *Hon. Sec.*—A. Davies, Esq.
- LEWES : *Hon. Sec.*—Rev. R. Straffen.
- LISKEARD : *Hon. Sec.*—W. J. Corin, Esq.
- LIVERPOOL : *Hon. Sec.*—Rev. W. R. Blackett, 65, Bedford-street.
- MALVERN : *Hon. Sec.*—Rev. C. E. Ranken.
- MANCHESTER : *Hon. Sec.*—Rev. Canon Crane.
- MANSFIELD : *Hon. Sec.*—T. W. Clarke, Esq.
- MARCH : *Hon. Sec.*—Rev. J. Cater.
- MARGATE : *Hon. Sec.*—Rev. G. Collis.
- MARKET HARBOROUGH : *Hon. Sec.*—Joseph Nunnally, Esq.
- MIDDLEBOROUGH : *Hon. Sec.*—Rev. Edmund Jackson.
- MONTROSE : *Hon. Sec.*—Mr. Mackie.
- MORPETH : *Hon. Sec.*—Dr. Robinson.
- MOSSLEY : *Hon. Sec.*—Rev. J. Taylor.
- NEWARK : *Hon. Sec.*—Evelyn Falkner, Esq.
- NEWARK : Ladies' Committee. *Hon. Treas.*—Mrs. Tallents; *Hon. Sec.*—Mrs. G. Hodgkinson.
- NEWCASTLE : *Hon. Treasurer.*—Thomas Hodgkin, Esq.; *Hon. Sec.*—W. Lyall, Esq.
- NEWPORT PAGNELL : *Hon. Sec.*—F. Tayler, Esq.
- NORTHAMPTON : *Hon. Sec.*—H. Marshall, Esq.
- OLNEY : *Hon. Sec.*—W. Hipwell, Esq.



## LOCAL ASSOCIATIONS.

- OXFORD : *Hon. Sec.*—Rev. Edwin Hatch.  
PAISLEY : *Hon. Sec.*—Rev. J. Dods.  
PERTH : *Hon. Sec.*—John W. Jameson, Esq.  
PLYMOUTH : *Hon. Secs.*—J. B. Rowe, Esq., and J. Shelly, Esq.  
PORTSMOUTH : *Hon. Sec.*—  
PRESTON : *Hon. Sec.*—Rev. E. T. Linton.  
READING : *Hon. Sec.*—Rev. T. H. Armstrong.  
REIGATE and REDHILL : *Hon. Sec.*—W. Wilson Saunders, Esq.  
RICHMOND, SURREY : *Hon. Sec.*—R. R. Alexander, Esq.  
SCARBOROUGH : *Hon. Sec.*—Rev. J. Bedford.  
SEVENOAKS : *Hon. Sec.*—Graham Jackson, Esq.  
SOUTHPORT : *Hon. Sec.*—George Lee, Esq.  
SHERBORNE : *Hon. Sec.*—J. Farmer, Esq.  
SOWERBY : *Hon. Sec.*—Rev. A. L. W. Bean.  
ST. ALBANS : *Hon. Sec.*—Rev. W. J. Lawrance.  
ST. ANDREW'S : *Hon. Secs.*—Dr. Lees and Dr. Mitchell.  
ST. GERMANS : *Hon. Sec.*—R. Kerswill, Esq.  
SKIPTON : *Hon. Sec.*—Rev. J. Windsor.  
STALYBRIDGE : *Hon. Sec.*—Rev. Dr. Cranswick.  
STOCKTON : *Hon. Sec.*—Joseph Laidler, Esq., M.D.  
STIRLING : *Hon. Sec.*—Rev. W. Taylor.  
STROUD : *Hon. Sec.*—T. S. Osborne, Esq.  
TAUNTON : *Hon. Sec.*—R. J. Shepherd, Esq.  
TAVISTOCK : *Hon. Sec.*—Mr. Frederick Clarke.  
TEIGNMOUTH : Rev. H. Hutchins.  
TIVERTON : *Hon. Sec.*—John Allen, Esq.  
TORQUAY : *Hon. Sec.*—Rev. G. E. Phillips.  
TUNBRIDGE WELLS : *Hon. Sec.*—Capt. Palmer, R.E.  
WAKEFIELD : *Hon. Sec.*—Rev. H. Douglas.  
WARMINSTER : *Hon. Sec.*—W. Frank Morgan, Esq.  
WELLS : *Hon. Sec.*—W. I. Welsh, Esq.  
WESTON-SUPER-MARE : *Hon. Secs.*—Capt. T. Townsend, R.E., and J. Titley, Esq.  
WHITBY : *Hon. Sec.*—E. W. Chapman, Esq.  
WHITEHAVEN : *Hon. Sec.*—  
WILLESDEN : *Hon. Sec.*—Rev. J. Crane Wharton.  
WINCHESTER : *Hon. Sec.*—Miss Zornlin.  
WINDSOR : *Hon. Sec.*—Rev. Stephen Hawtrey.  
WORCESTER : *Hon. Sec.*—Rev. Francis J. Eld.  
YARMOUTH : *Hon. Sec.*—Rev. H. R. Nevill.
-

## PHOTOGRAPHS.

One hundred photographs have been carefully selected out of those in the possession of the Society, and can be purchased by subscribers for £4, and by non-subscribers for £5. Those marked in the list \* are the 25 best, and can be purchased by subscribers for 25s., and by non-subscribers for 35s. Those marked † are the 50 best, and can be purchased by subscribers for 45s., and by non-subscribers for 55s. A selection of any 25 or 50 can be made at the same terms, but the marked ones are recommended as the best photographs. Each of the three sets forms a complete series of itself. Single photographs from among these selected ones are charged 1s. 3d. to subscribers, and 1s. 6d. to non-subscribers. Lists may be obtained of the Agent, Mr. Edward Stanford, 6, Charing Cross.

---

### THE "SEAL OF HAGGAI."

Casts of this small seal have been taken. Their price is 2s. 6d. each.

---

### THE MOABITE STONE.

Facsimile casts of the small fragments have been taken. They can be procured at cost price.

Photographs (to be obtained of Mr. Edward Stanford, 6, Charing Cross)—

1. One-third size of Captain Warren's tracings (mounted)... £0 3 6
2. Full size of the squeezes themselves, in four photographs... 2 10 0

- BLACKBURN : *Hon. Secs.*—Rev. Canon Birch and Rev. A. B. Grosart.
- BODMIN.—See *supra*, p. 3.
- BOTHWELL.—Through the “Bible Society” of the town.
- BOURNEMOUTH : *Hon. Sec.*—Rev. Dr. Edersheim.
- BRADFORD : *Hon. Sec.*—Rev. W. Dyson.
- BRIGHTON : *Hon. Sec.*—Rev. C. E. Douglass.
- BROADSTAIRS : *Hon. Sec.*—Rev. J. H. Carr.
- BROMLEY : *Hon. Sec.*—Rev. W. J. Devereux.
- BURNLEY : *Hon. Sec.*—Rev. H. A. Crosbie.
- BURY : *Hon. Treas.*—Rev. Canon J. Hornby ; *Hon. Sec.*—Rev. W. Thorburn.
- CALLINGTON : *Hon. Sec.*—Rev. F. V. Thornton.
- CAMBRIDGE : *Hon. Sec.*—Rev. T. G. Bonney, Tutor of St. John’s College.
- CANADA : Toronto.—Subscriptions are kindly received by the Hon. G. W. Allan.
- CARDIFF : *Hon. Sec.*—
- CHELMSFORD : *Hon. Sec.*—H. S. Coleman, Esq.
- CHELTENHAM : *Hon. Sec.*—Dr. E. Wilson.
- CHESTER : *Hon. Sec.*—The Very Rev. the Dean of Chester.
- CHIGWELL : *Hon. Sec.*—Rev. H. M. Robinson.
- CHIPPENHAM : *Hon. Sec.*—A. T. Keary, Esq.
- CLIFTON and BRISTOL : *Hon. Secs.*—Rev. C. H. Wallace and Rev. J. B. Goldberg.
- COUPAR ANGUS : *President*—Very Rev. Dean Torry.
- CROYDON : *Hon. Sec.*—Mr. Warren.
- DARLINGTON : *Hon. Sec.*—J. P. Pritchett, Esq.
- DEVIZES : *Hon. Sec.*—Rev. W. P. S. Bingham.
- DEVONPORT : *Hon. Sec.*—J. Venning, Esq.
- DORCHESTER : *Hon. Sec.*—Rev. Handley Moule.
- DOVER : *Hon. Sec.*—Mr. W. P. Mummery.
- DUNDEE : *Hon. Sec.*—R. Mackenzie, Esq.
- DURHAM : *Hon. Sec.*—Rev. J. Dodd.
- DUNFERMLINE : *Hon. Sec.*—Rev. And. Brydie.
- EASTBOURNE : *Hon. Sec.*—Rev. H. R. Whelpton.
- EDINBURGH : *Hon. Secs.*—Rev. W. Lindsay Alexander, D.D., and T. B. Johnston, Esq., F.R.G.S., 4, St. Andrew Square.
- EXETER : *Hon. Sec.*—Rev. Prebendary Acland, Broad Clyst.
- FALMOUTH, for the County of Cornwall : *Hon. Secs.*—A. Lloyd Fox and W. P. Dymond, Esq.
- FAVERSHAM : *Hon. Sec.*—Charles Smith, Esq.
- FORFAR : *Hon. Sec.*—T. Wilkie, Esq.
- FLEETWOOD : *Hon. Sec.*—G. Curwen, Esq.
- FROME : *Hon. Sec.*—Rev. T. G. Rooke.
- FOLKESTONE : *Hon. Sec.*—
- GLASGOW : *Hon. Secs.*—Rev. W. Dickson, D.D., Rev. Donald Macleod, D.D., and A. B. M’Grigor, Esq.
- GLOUCESTER : *Hon. Secs.*—Rev. J. Bowman and F. Cooke, Esq.
- GREENOCK : *Hon. Sec.*—D. MacDonald, Esq.
- GUILDFORD : *Hon. Sec.*—Capt. Campbell, R.N.
- HALIFAX : *Hon. Sec.*—J. H. Bracken, Esq.
- HALSTEAD : *Hon. Secs.*—Rev. S. J. Eales and Rev. J. W. Coombes.
- HASTINGS : *Hon. Sec.*—
- HELENSBURG : *Hon. Sec.*—Rev. A. Murray McCallum.

# LOCAL ASSOCIATIONS.

- HERTFORD: *Hon. Sec.*—W. M. Armstrong, Esq.  
 HEXHAM: *Hon. Sec.*—John Hope, Esq., jun.  
 HITCHIN: *Hon. Sec.*—David Lloyd, Esq.  
 HUDDERSFIELD: *Hon. Sec.*—Henry Barker, Esq., Railway St., St. George's Sq.  
 HULL: *Hon. Sec.*—Dr. Bell.  
 HUNTINGDON: *Hon. Sec.*—Rev. Gerald Vesey.  
 INVERNESS: *Hon. Sec.*—Capt. Bolland, R.F.  
 IPSWICH: *Hon. Sec.*—Rev. J. R. Turnock.  
 IRVINE: *Hon. Sec.*—Adam Sutherland, Esq.  
 KIRKALDY: *Hon. Sec.*—John Barnett, Esq.  
 LEEDS: *Hon. Sec.*—Edward Atkinson, Esq.  
 LEITH: *Hon. Sec.*—A. Davies, Esq.  
 LEWES: *Hon. Sec.*—Rev. R. Straffen.  
 LISKEARD: *Hon. Sec.*—W. J. Corin, Esq.  
 LIVERPOOL: *Hon. Sec.*—Rev. W. R. Blackett, 65, Bedford-street.  
 MALVERN: *Hon. Sec.*—Rev. D. F. A. Grahame.  
 MANCHESTER: *Hon. Sec.*—Rev. Canon Crane.  
 MANSFIELD: *Hon. Sec.*—T. W. Clarke, Esq.  
 MARCH: *Hon. Sec.*—Rev. J. Cater.  
 MARGATE: *Hon. Sec.*—Rev. G. Collis.  
 MARKET HARBOROUGH: *Hon. Sec.*—Joseph Nunnally, Esq.  
 MIDDLESBOROUGH: *Hon. Sec.*—Rev. Edmund Jackson.  
 MONTROSE: *Hon. Sec.*—Mr. Mackie.  
 MORPETH: *Hon. Sec.*—Dr. Robinson.  
 MOSSLEY: *Hon. Sec.*—Rev. J. Taylor.  
 NEWARK: *Hon. Sec.*—Evelyn Falkner, Esq.  
 NEWARK: Ladies' Committee. *Hon. Treas.*—Mrs. Tallents; *Hon. Sec.*—Mrs. G. Hodgkinson.  
 NEWCASTLE: *Hon. Treasurer.*—Thomas Hodgkin, Esq.; *Hon. Sec.*—W. Lyall, Esq.  
 NEWPORT PAGNELL: *Hon. Sec.*—F. Tayler, Esq.  
 NORTHAMPTON: *Hon. Sec.*—H. Marshall, Esq.  
 OLNEY: *Hon. Sec.*—W. Hipwell, Esq.  
 OXFORD: *Hon. Sec.*—Rev. Edwin Hatch.  
 PAISLEY: *Hon. Sec.*—Rev. J. Dods.  
 PERTH: *Hon. Sec.*—John W. Jameson, Esq.  
 PLYMOUTH: *Hon. Secs.*—J. B. Rowe, Esq., and J. Shelly, Esq.  
 PORTSMOUTH: *Hon. Sec.*—  
 PRESTON: *Hon. Sec.*—Rev. E. T. Linton.  
 READING: *Hon. Sec.*—Rev. T. H. Armstrong.  
 REIGATE and REDHILL: *Hon. Sec.*—W. Wilson Saunders, Esq.  
 RICHMOND, SURREY: *Hon. Sec.*—R. R. Alexander, Esq.  
 SCARBOROUGH: *Hon. Sec.*—Rev. J. Bedford.  
 SEVENOAKS: *Hon. Sec.*—Graham Jackson, Esq.  
 SOUTHPORT: *Hon. Sec.*—George Lee, Esq.  
 SHERBORNE: *Hon. Sec.*—J. Farmer, Esq.  
 SOWERBY: *Hon. Sec.*—Rev. A. L. W. Bean.  
 ST. ALBANS: *Hon. Sec.*—Rev. W. J. Lawrance.  
 ST. ANDREW'S: *Hon. Secs.*—Dr. Lees and Dr. Mitchell.  
 ST. GERMANS: *Hon. Sec.*—R. Kerswill, Esq.

SKIPTON : *Hon. Sec.*—Rev. J. Windsor.  
 STALYBRIDGE : *Hon. Sec.*—Rev. Dr. Cranswick.  
 STOCKTON : *Hon. Sec.*—Joseph Laidler, Esq., M.D.  
 STIRLING : *Hon. Sec.*—Rev. W. Taylor.  
 STROUD : *Hon. Sec.*—T. S. Osborne, Esq.  
 TAUNTON : *Hon. Sec.*—R. J. Shepherd, Esq.  
 TAVISTOCK : *Hon. Sec.*—Mr. Frederick Clarke.  
 TIVERTON : *Hon. Sec.*—John Allen, Esq.  
 TORQUAY : *Hon. Sec.*—Rev. G. E. Phillips.  
 TUNBRIDGE WELLS : *Hon. Sec.*—Capt. Palmer, R.E.  
 WAKEFIELD : *Hon. Sec.*—Rev. H. Douglas.  
 WARMINSTER : *Hon. Sec.*—W. Frank Morgan, Esq.  
 WELLS : *Hon. Sec.*—W. I. Welsh, Esq.  
 WESTON-SUPER-MARE : *Hon. Secs.*—Capt. T. Townsend, R.E., and J. Titley, Esq.  
 WHITBY : *Hon. Sec.*—E. W. Chapman, Esq.  
 WHITEHAVEN : *Hon. Sec.*—  
 WILLESDEN : *Hon. Sec.*—Rev. J. Crane Wharton.  
 WINCHESTER : *Hon. Sec.*—Miss Zornlin.  
 WINDSOR : *Hon. Sec.*—Rev. Stephen Hawtrey.  
 WORCESTER : *Hon. Sec.*—Rev. Francis J. Eld,  
 YARMOUTH : *Hon. Sec.*—Rev. H. R. Nevill.

## PHOTOGRAPHS.

*Agent.*—Mr. Stanford, 6, Charing Cross.

Price, 1s. 6d. each. To Annual Subscribers of 10s. 6d. and upwards, 1s. cash.  
 The new list is now ready.

## THE "SEAL OF HAGGAI."

Casts of this small seal have been taken. Their price is 2s. 6d. each.

## THE MOABITE STONE.

Facsimile casts of the small fragments have been taken. They can be procured at cost price.

Photographs (to be obtained of Mr. Edward Stanford, 6, Charing Cross)—

1. One-third size of Captain Warren's tracings (mounted)... £0 3 6
2. Full size of the squeezes themselves, in four photographs... 2 10 0

















